PENCIL POINTS

A JOURNAL for the DRAFTING ROOM

The Young Architect—What of the Future? . . *John C. Hegeman*

A New Field for the Architect . . . . . *"Gargoyle," A. I. A.*

An Architect's Notes on Pen Drawing, 4 . . . . *Sydney E. Castle*

How to Find a Job During a Depression . . . *Royal Barry Wills*

The Architect and the Grand Plan, 4 . . . . . *Francis S. Swales*

Misadventures of a Draftsman, 6 . . . . . *George Allen*

Draftsman's Data Sheets . . . . . *Don Graf*

The Specification Desk . . . . . *David B. Emerson*

Plates by *Herman Webster, James I. Arnold, Francis S. Swales, Cecil Briggs, Theodore de Postels, Edgar I. Williams, John Foster*

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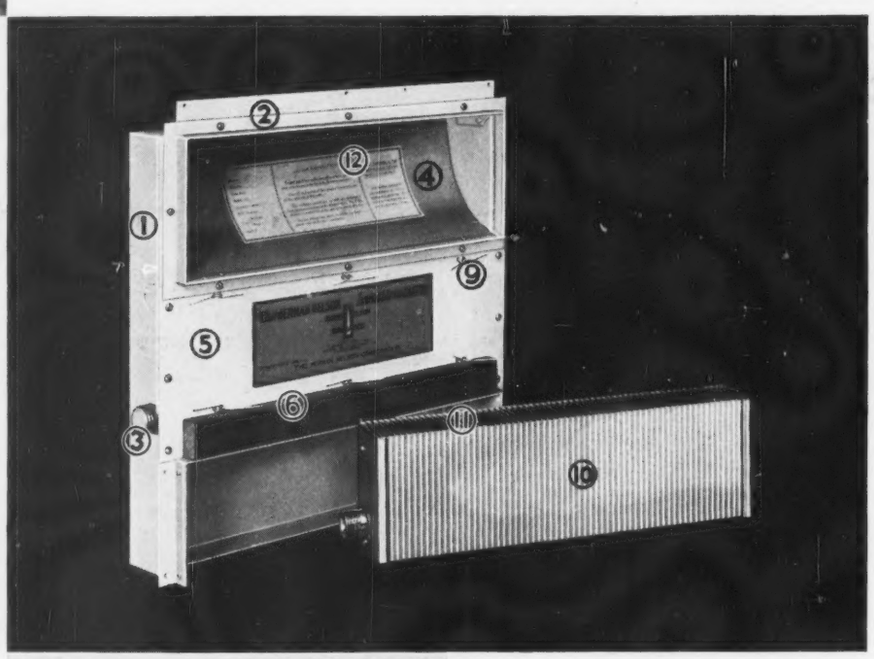

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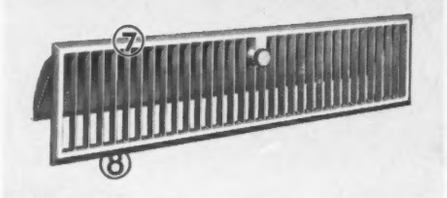

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Architecture
Wehr

H. R. 6187

As a result of the untiring efforts of the Committee on Public Works of the American Institute of Architects, led by Louis La Beaume of St. Louis, a bill has been presented to the Seventy-second Congress "To *direct* the Secretary of the Treasury to contract for architectural and engineering services in the designing and planning of public buildings." If this bill passes it will mark a great forward step in the matter of getting the government to make the best use of the architectural brains of the country. Buildings under the jurisdiction of the Treasury Department will go ahead more quickly than has heretofore been possible and this will bring work for the profession and for all those engaged in the building industry in all sections of the country. It will be a good thing for all hands—the profession will get work it needs badly and the government will get better and more economical buildings. Does the bill deserve the energetic support of the *entire* profession? Well, if it doesn't the profession is indeed dead.

The bill, which was introduced on December 17 by the Honorable Robert A. Green of Florida, member of the House Committee on Public Buildings and Grounds, reads as follows:—

"*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That the Secretary of the Treasury is hereby authorized and directed to employ by contract, and at the established rates of compensation, outside professional or technical service of competent persons, firms, or corporations, for the architectural and engineering designing and planning of such Federal buildings as are now or may, in the future, be placed under the jurisdiction of his department, without reference to the Classification Act of 1923, as amended, or to section 3709 of the Revised Statutes of the United States.

"SEC. 2. That such employment shall be based at all times on the highest grounds of proven professional ability in order that our Federal architecture may truly represent our national genius and keep pace with the rapid development of the arts of architecture and engineering. Architects or engineers shall not be employed without prior submission to the Secretary of the Treasury of satisfactory evidence of their qualifications and experience.

"SEC. 3. That wherever circumstances warrant, such services shall be contracted for by the employment of the ablest architects and engineers resident in the general sections of the country wherein such Federal buildings are to be erected.

"SEC. 4. At the discretion of the Secretary of the Treasury, the employment of outside architects or engineers may be omitted in connection with public buildings of a total cost for building and site of not more than $50,000.

"SEC. 5. That all such individuals, firms, or corporations shall render their services subject to the approval and under the direction of the Supervising Architect of the Treasury, whose duty it shall be to act for the Government in all matters regarding sites, the allotment and subdivision of space, the control of technical detail, the letting of contracts, and the supervision of the erection of said Federal buildings.

"SEC. 6. Nothing in this Act shall be construed to affect the duties of the Supervising Architect of the Treasury in regard to maintenance, alterations, repair, or supervision of either existing or proposed public buildings.

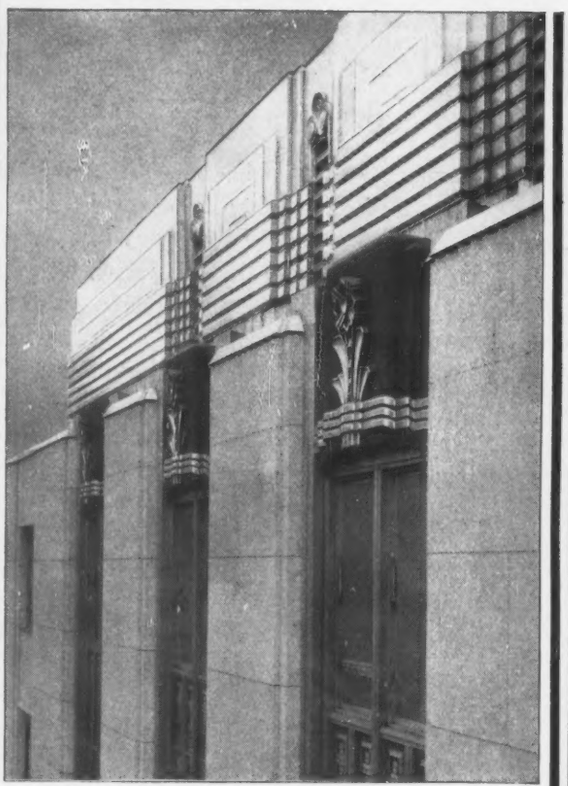
"SEC. 7. That the cost of compensation for outside professional or technical services shall be charges to the appropriation for the construction of the building for which such services are rendered.

"SEC. 8. All Acts or parts of Acts inconsistent with the terms of this Act are hereby repealed."

Now let's get busy—all of us. Every architect and every member of an architect's staff stands to benefit from this bill. Every one of them, if he hasn't already done so, should sit right down and write to his representatives in the House and in the Senate, urging, as strongly as he knows how, the passage of the measure. Needed legislation is passed only by the concerted action of large groups of people. Pressure is necessary—if we all remain apathetic the bill will remain in committee and will die a quiet death. If, on the other hand, we all get behind and push, stressing above all at this time the great saving to the government that will be effected if it goes through, it will undoubtedly be reported and passed.

The small practitioner in the small community may feel that it is unlikely that he will benefit directly from the passage of this bill. He may say to himself "All that work will go to the larger offices in the larger centers." But anything that helps raise the prestige of the profession in general is bound to help him. If the bigger fellows get more big jobs they will be less likely to encroach on his domain by taking the smaller jobs away from him. Furthermore, the measure is a permanent one, and who can say that the small practice, well conducted, will not grow to a future position of importance.

We therefore urge our readers to act now. Don't be provincial about this thing. It means too much to all of you. Do your part and you will never regret it.



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Federal Reserve Branch Bank, *Architect:* Walker and Weeks, Cleveland, Ohio; *General Contractor:* Mellon Stuart, Pittsburgh, Pa.; *Aluminum Sheet Metal Contractor:* W. F. Overly and Sons, Greensburg, Pa.; *Ornamental Contractor on Aluminum Work:* John Harsch Bronze and Foundry Co., Cleveland, Ohio; *Aluminum Sash Contractor:* The Kawneer Manufacturing Co., Niles, Michigan.

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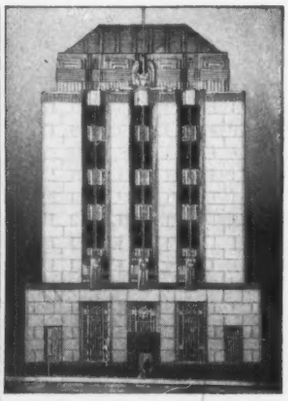

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PENCIL POINTS

An Illustrated Monthly JOURNAL for the DRAFTING ROOM *Edited by* RUSSELL F. WHITEHEAD KENNETH REID & E. L. CLEAVER *Published by* THE PENCIL POINTS PRESS, INC.
Ralph Reinhold, *President*, P. H. Hubbard, *Vice-President*, William V. Montgomery, *Secretary*

This Month and Next

The first set of four *Draftsman's Data Sheets* appears in this issue. We hope you will like the idea and that, as the series goes on from month to month, you will find the collection of information therein contained of ever-increasing value. As Mr. Graf, the author of these sheets, points out, much of the data is elsewhere available but in such a variety of forms and so scattered that it is difficult to find as needed. It is our hope that this series of sheets will provide for each man who collects them a convenient reference work which he will have always at hand for use in the drafting room.

What in many respects is one of the most remarkable architectural models ever made will be shown next month. It was made for McKim, Mead, and White and for their clients, the Pennsylvania Railroad, to study the extremely complex circulation problems arising in the design of the Newark, N. J., Railway Station.

M. Felix Boutron, the distinguished French Architect, will be represented in February by a very unusual composition in color. This color plate is distinctly different from anything we have done before and we are sure that it will attract a lot of attention.

Contents

For January, 1932

Frontispiece—Etching by Herman Webster	2
The Young Architect—What of the Future? *By John C. Hegeman*	3
A New Field for the Architect *By "Gargoyle"*	5
An Architect's Notes on Pen Drawing—4 *By Sydney E. Castle*	9
How to Find a Job During a Depression *By Royal Barry Wills*	13
The Architect and the Grand Plan—4 *By Francis S. Swales*	21
Plates	29-40
Color Plates	35-37
Misadventures of a Draftsman—6 *By George H. Allen*	41
Popularizing the Profession with the Public and with Itself *By D. Knickerbacker Boyd*	45
Tradition *By Emery Kanarik*	53
A *Vade Mecum* for Draftsmen *By Don Graf*	55
Here & There & This & That	64
The Specification Desk	69

William Williams who will be remembered particularly for his little story "Apples," that appeared in our pages about a year ago, has written another amusing piece for next month on "The Cultural Advantages of Unemployment." While the subject is not one to be joked about, we think it may help some of the unemployed draftsmen to forget their troubles for a moment and smile with the author.

Another article on estimating, by Messrs. Walsh and Saxe of Columbia University, will be presented next month. This time they will bring out some surprising things about the cost of wall construction that may arouse a bit of controversy. We won't say what they are going to show but we are certain it will be surprising to some people.

Another of the series "French Comrades in America" will appear next month. It will be devoted to the work of Jean Hébrard, Professor of Architecture at the University of Michigan, formerly at the University of Pennsylvania. The article was written by Harry Sternfeld, one of Professor Hébrard's colleagues at Pennsylvania, who is well known to readers of PENCIL POINTS.

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PENCIL POINTS

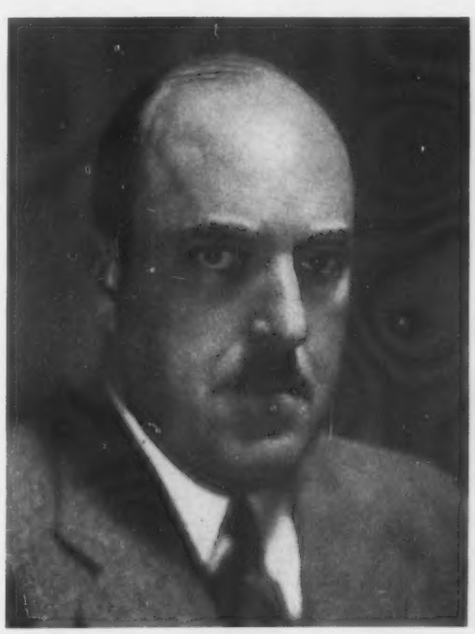
Volume XIII January, 1932 Number 1

The Young Architect— What of the Future?

By John C. Hegeman

One of the tragic consequences of the current economic situation, it has seemed to me, is the dislocation of standards and habits of thought in the professions and in business. The average man, employer and employee alike, is bewildered and, too often, discouraged when he finds all the time-honored formulæ of no avail in his struggle to work out of misfortune and financial troubles. And it is no comfort to the individual, faced with the hard problem of living, to be told that we are all in the same boat.

The depression has worked hardship upon all classes but it seems young professional men and women have found it particularly difficult to adjust themselves to the changed conditions. Most of them have had no experience in hard times and most of them are without business training. The young architects have been particularly affected because of the very serious slump in the building business.



JOHN C. HEGEMAN
President, Hegeman-Harris Company, Inc.

I have no solution of the unemployment situation to offer, but I am glad to comply with the request of the editor of PENCIL POINTS to set down such suggestions as I can think of to help young architects find some outlets for their abilities and experience until better times arrive. I am conscious that there is little I can say that has not been said before, but I offer the following thoughts for what they are worth.

For one thing, let me suggest that young architects should bear in mind that "exposure" to opportunity is essential. By this I mean that the mere daily rounds of calls at established offices is not likely to produce results. I should say that the young architect ought to use his creative talent to "make work" for himself, expose himself in unconventional and direct ways to employment. For example:

President Hoover recently issued a statement urging home owners to modernize their houses; to make needed repairs, alterations, changes in layout or decoration. It is well known that there are literally hundreds of thousands of home owners in the metropolitan district who provide a possible market for small work.

Why should not young architects make a house to house canvass, either working alone or under a cooperative arrangement, seeking work of this sort? I venture to say that they would obtain many nice little jobs for the asking because we all know from experience that the average man or woman will yield to the power of suggestion more readily in matters affecting their home and family than for any other expenditure.

Throughout the metropolitan district, I think, young architects will find many owners of small store buildings who will be receptive to the suggestion that he modernize his store front or make changes in the interior layout. Such alterations, it can be argued, will more than justify a modest expenditure by increased rentals.

Then there is the very considerable field of the suburban home owner who can be approached with the suggestion that he entrust landscaping planning to an architect who will bring taste and sound principles to the task of ground decoration.

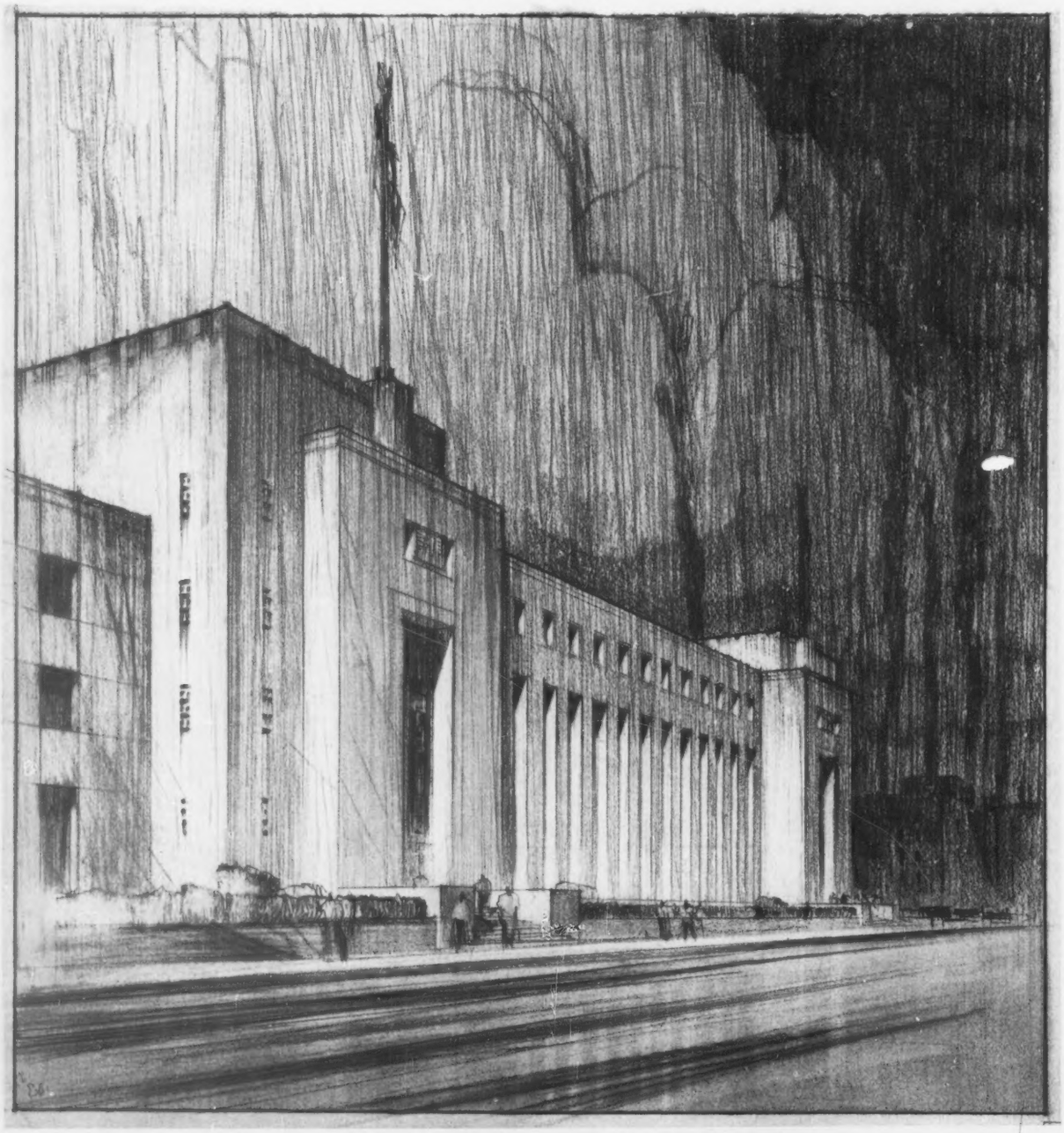
As a matter of fact, it seems to me, the young architect will find it not alone profitable to "sell his professional service" personally for the present needs but actually he will be building in a substantial way for the future. Many an eminent architect obtained

his start by doing small commissions well and by the same token many a fine commission has been developed by contacts established in unconventional ways.

The young architect no doubt will find it distasteful to look for work in the way I have suggested. Such a procedure does violence to his artistic sense and the rebuffs and refusals will not be pleasant. He will, however, be gaining valuable experience and in not a few instances a latent talent for sales work will be uncovered which later on in life will prove very useful.

The problem of finding employment in the architectural profession undoubtedly is serious in normal times if, as many observers believe, the profession already is overcrowded. I think young architects will find the present a good time to face the facts and try to ascertain just what the future is going to be for them. For one thing, I should suggest that the young architect talk frankly with older men in his profession who know him and ask their judgment of his abilities and prospects of success. No man should persist in a profession for which he is not well fitted. On the other hand, no man of talent should be allowed to drift away from the profession because of hard times.

I feel that the young architect who goes out into the field to create business for himself will find the experience very valuable later on when he is called upon to advise his clients in matters of expenditure as well as in design, because any man who successfully weathers this depression by his own effort is quite likely to have a very definite realization of what a dollar means.



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SHREVE, LAMB, AND HARMON, CONSULTING ARCHITECTS

PRELIMINARY STUDY, UNITED STATES POST OFFICE AND FEDERAL COURT HOUSE, CHATTANOOGA, TENNESSEE

A New Field for the Architect

An A. I. A. Member Suggests a Way to Get Work

By "Gargoyle"

An apology is due both the readers and the editors of this magazine for the author's desire to retain his anonymity. The reason will be apparent after a study of the suggestions to follow; for the proposition to be stated below, notwithstanding that it is offered as a possible lifesaver to those of the profession who may care to take it up, nevertheless involves a scheme too modern, too business-like, and (shall we admit it?) too friendly to the building trades, to receive the A.I.A. sanction . . . . Wherefore the apology—likewise the anonymity.

* * * *

We have heard a good deal about facing the facts. There has been a Depression—there still remains a Depression—and those of us who dare to think in print (anonymously!) forecast plenty more of the same insofar as the building trades are involved. One fact to face is that for several years to come there are not going to be enough new buildings to fill up our drafting-boards; the next fact to face is that we can't all become bond salesmen, and even if we did there's no one to buy the bonds. So let us get right down to the point—what else remains to be done? What are we uniquely fitted for, outside of designing and planning new construction?

The first and most obvious answer is as architects for alterations. The same objection still holds good, however—there are not going to be enough alteration jobs to go around. Furthermore, there will be even more chance in the future than there has been in the past that alteration work will be done without the "luxury of an architect," unless we take radical steps to alter, first of all, the nature of our practice.

So we are forced to face the fact of the economic requirement that we alter ourselves, first. Let us, then, deign to observe that buildings need the services of trained technicians, not only for original planning and new construction, not only for alterations and additions, but also for *upkeep, maintenance,* and *repair.*

These three seem to comprise a small field, at first glance—but only because it is a field that has been utterly ignored, and never exploited. Statistically, however, it is the largest field of all in the building trades—ask the plumber, carpenter, painter, steamfitter, sheet-metal-worker—ask them what field brings them in the largest part of their jobs. And then when they have replied that if it hadn't been for repair work, this last year or so, they'd have joined the Red Army, ask still one more question—ask the architect how much more repair work—or upkeep and maintenance work—is to be required in the immediate future as a result of the Depression instead of new building, and how can the architect's services be used in direct conjunction with work of this kind?

There is an answer. Hiding securely behind the cloak of anonymity, we shall dare to give it. Let us first look at the subject from the owner's viewpoint—a viewpoint which, by the way, he hasn't yet been educated to have. The building—be it apartment, factory, store, or private home—has deteriorated; it is sick; something has to be done. This "something" involves, let us say, the work of about seven or eight trades; it involves the ripping out of obsolete or worn-out equipment and its replacement by new; it involves labor and materials; and it ought to involve, at the very least, a set of specifications, competitive bidding, and superintendence—perhaps also a few drawings if the nature of the work so merits. The owner, of course, doesn't know it involves all of this—no one has ever told him so—and his natural tendency is to call in a plumber or a steamfitter or a plasterer or maybe even a carpenter-contractor named Bill (appropriately), and "get an estimate." As architects, we know what happens—only we have never thought much about it; it isn't in our line. Well, it's going to be in future, or we won't have any line at all . . . .

So far, however, only one-third of the picture has been sketched—and very roughly. How about the general contractor these days? He, too, has heard something about a Depression. He, too, never thought much about mere repair work. But just suppose someone were to submit a complete set of specifications, with a formal request from a reputable architect for bids to be submitted at noon on the 12th? Suppose the total amount involved came to only $3,000 with a net profit of $150 to $200 included; and then suppose a hundred or two hundred of these little jobs came in each year of a Depression, from a group of architects who had the nerve to become specialists in maintenance. . . .

Leaving the general contractor sketched in outline above, we now glance at the manufacturer, interrupting him as he stares at the pages of red-ink computations on his ledger. Would he have any objection to selling his product for use in replacement and repair work? Would he mind distributing one thousand Improved Self-acting Silent Roller-bearing Perfection Units to one thousand repair jobs, instead of sitting around waiting until he could get ten orders for one hundred each on new construction? Would he? Well, just give him a chance.

So much for the rough sketch. Now we strike difficulties in trying to complete the picture. How

can the owners be educated, and how can the architects who want it get the work? The answer can be found only by daring to get out of our rut and follow the methods of up-to-date business; combine forces, get up a Campaign, slogans, high-pressure salesmanship, advertising—the whole thing—or nothing. NOW, we've said it! Nothing will stop us, now, from continuing.

We have a real, true, honest-to-God service to offer the owner; our years of experience and technical training make us uniquely fitted to perform this service; and at the same time we are in a position to bring business to a great number of general contractors and subcontractors and to every manufacturer of products used in the building trades. All that is needed is that we first "sell" this idea to the contractors and the manufacturers, and then that they themselves get together and "sell" it to the public. Were there a National Association of Maintenance Contractors, or an Institute for the Repair of Buildings, or a Building Owners' Technical Service Bureau, the job would be easy. But failing this, and lacking the time to organize it, any local group of general contractors could organize, advertise, and circularize both owners and architects, signifying their purposes and outlining the scope of their work in this field. The local Bureau of Building Repair could likewise enlist the cooperation—and contributing membership—of jobbers, lumber yards, supply houses, and perhaps national manufacturers, and could combine forces in advertising.

Now let us examine the organization of a hypothetical Newtown Bureau of Building Repair, and see what it does. It has an office, in the Newtown National Bank Building, and employs a technical expert and a stenographer. It has a Sweet's Catalog, a file of manufacturers' catalogs, all the architectural magazines, a sample room, and a drafting table. It has a list of all the local contractors, subcontractors, mills, and material houses who are members of the Bureau, and another list of those who are not yet members—but who will be next year. It has a list of whatever local architects care to have their names on record, and it uses this list as shall be explained below. Its technical expert, who is also something of a business man and who knows a bit about advertising as well, spends his time finding out what buildings, homes, stores, etc., in Newtown are in need of repair, and in looking over these buildings and consulting with their owners. He is a "contact man" and a good salesman—but he is selling service only—as advertised. If Newtown is a large town, or if the work of the Bureau grows, he has a staff—more jobs for the unemployed.

The contact man, or technical expert (or Repair Diagnostician), talks to the owner on behalf of the Bureau, and gets a rough idea of the work to be done and the amount involved. If the amount of work or the number of trades represented warrants it, he advises the owner to get in touch with one of the architects listed with the Bureau, to have a specification drawn up in order to secure competitive estimates. He explains to the owner that the architect will charge a fee for this service, based on the amount of the lowest estimate, but that this fee will be saved many times over through the securing of intelligent bids and careful superintendence. Speaking on behalf of the members of the Bureau, he recommends that the work be handled in this manner.

The specification, as prepared by the architect, is given in to the Bureau office and the technical expert then decides what contractors shall be invited to estimate. He is guided in this decision by several considerations: the nature and amount of the work involved, and its location; the firms favored or recommended by the architect or the owner, or other firms, either chosen by lot or in rotation. Possibly the by-laws of the Newtown Bureau of Building Repair provide that a certain number of non-members shall also be asked to compete—with the idea of their becoming members next year. Possibly they provide that all members shall be given a chance to estimate on every job. In any event, the Bureau members are naturally given preference, and perhaps—though it is not for us to say—the mills and material dealers who are members are also given preference.

This is not all, however. Each general contractor submitting estimates is required to allow in his bid a certain percentage for the maintenance of the Bureau itself—or perhaps for dividends for its members. There is nothing secret about this—the owner is welcome to know it—for the Bureau is functioning not only for its members, but for the benefit of the community at large. The owner is getting a better job done, under more reliable supervision and with less chance of extras or disappointments, by virtue of its existence. The Bureau is maintained partly through this percentage, and partly by the annual dues of its members; it is not a closed shop or a corporation in restraint of trade; on the contrary, anyone is at liberty, and welcome, to join; and everyone is to be benefited.

The Bureau advertises—extensively. It tells the public not only why it has been formed, and who are its members, but it also tells the economic advantages of "Doing That Repair Work," "Doing It Now," and "Employing an Expert" to see that it is done right.

All very well, then, from the viewpoints of the owner, the contractor, the mill, and the manufacturer; but, we ask, why does the Bureau recommend architects? Why doesn't it handle the whole thing alone? The reason is that the members, in spite of the Organization and the Dividends, are still competitors; they still see the advantage of outside professional and disinterested service; and they know that the Bureau itself can best establish a reputation if its clients are guided by the training and technical experience of architects who can advise, not only what to do and how to do it, but also what NOT to do, and when it is better to avoid expenditure.

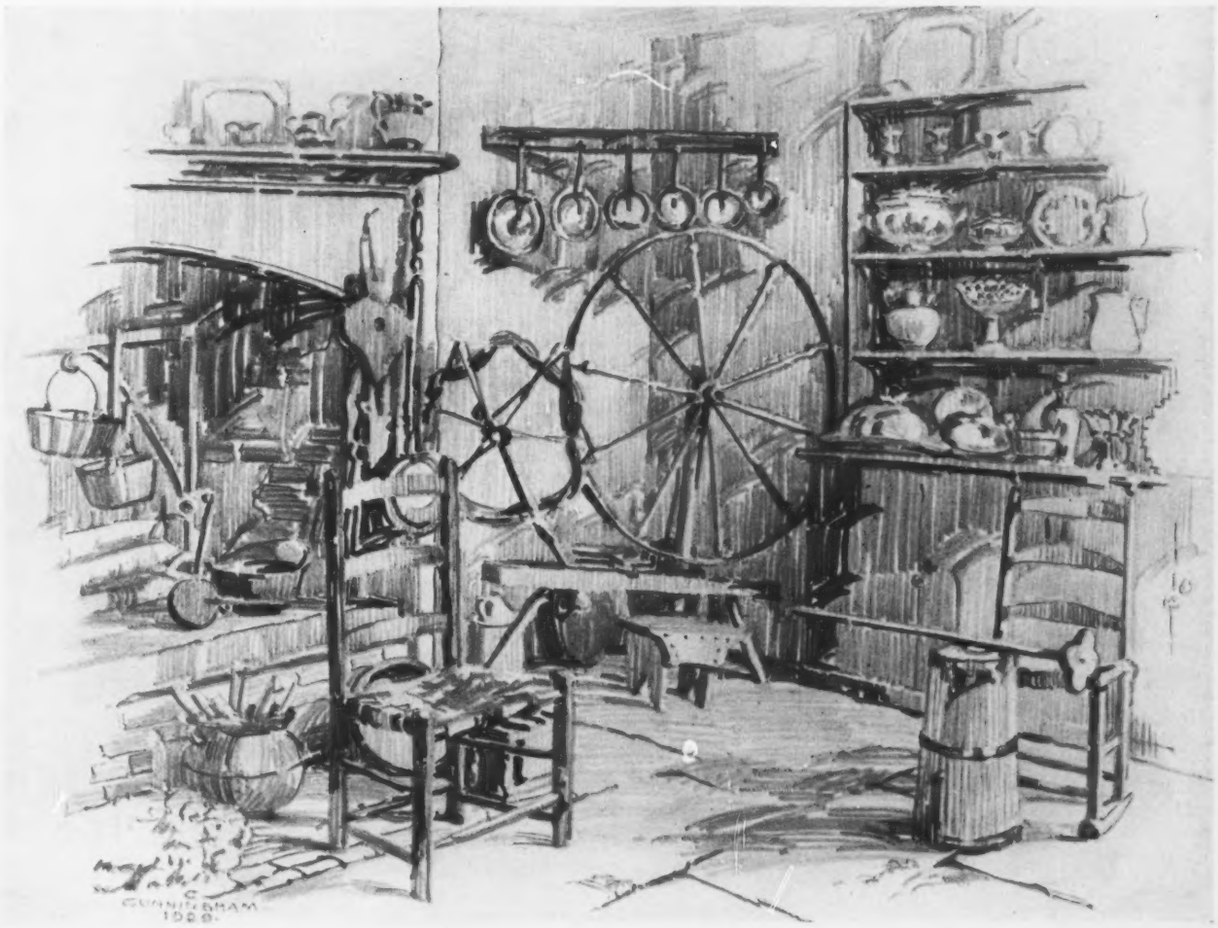
The Bureau's reputation is built up on the slogan of Service, and the more disinterested this service, the more owners will avail themselves of it. The Bureau members know that architectural service will add to

its prestige, and they are glad to recommend architects and to convince owners of the value of professional advice.

Now a word or two to the A.I.A., while still hiding behind anonymity. There is nothing to be shocked about in all this, nor anything too undignified for the Institute or its members. True enough, it puts the architect in the position of being recommended by the contractor; not only this, but by a group of contractors, who advertise. But the architect still retains his position of disinterested professional adviser, is still the agent of the owner, and still collects his fee from his client and no one else. He turns from the field of surgery, for building operations, and enters that of medicine, in prescribing cures for technical and structural ailments. He takes on a new specialty, that of the diagnostician, and he can still continue to wear spats and carry a cane if he chooses to do so.

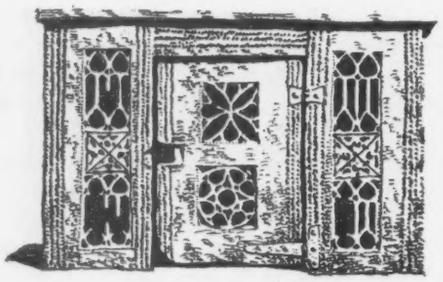
All that remains to be done is to sort out the criticism, and see if there are any constructive suggestions. The pages of this magazine are open, and so is its letter box. While it would seem that those contractors and manufacturers who are interested should themselves initiate the first local groups and become the founders of the Bureaus in their respective localities, nevertheless there seems no logical reason why an architect should not advise and assist them—anonymously, perhaps—along the lines herein suggested.

Finally, after the First Year, after the First Dividends, and after owners, builders, manufacturers and architects come to realize that there was some good in the old Depression after all, who knows but that the new profession wouldn't stay put, and that there wouldn't be a permanent spot on the map for the Building Repair Diagnostician, formerly shyly hiding away under the nom-de-plume, "Gargoyle"?

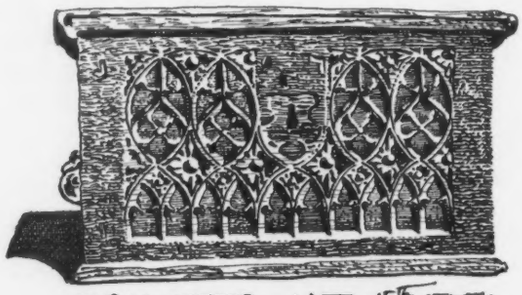


AN OLD SAVANNAH KITCHEN

FROM A PENCIL SKETCH BY CORNELIA CUNNINGHAM

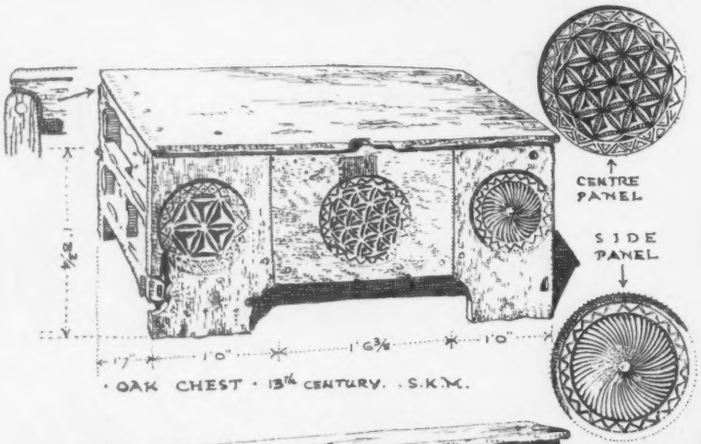


DOLE CUPBOARD - 15th CENTURY



SMALL COFFER - LATE 15th CENT:

FROM OAK COFFER - 14th CENTURY - 4'9" WIDE S.K.M.



· OAK CHEST · 13th CENTURY. S.K.M.

FORM IN OAK
LATE 14th or EARLY 15th cent: 8'0 x 10½" x 1'8½ H.

THE LEGEND OF THE TRUE CROSS.
SOLOMON ORDERS THE TREE TO BE CUT DOWN. GROUP IN OAK. S.K.M.
· EARLY 16th CENTY · CASTLE

PEN-AND-INK DRAWINGS BY SYDNEY E. CASTLE

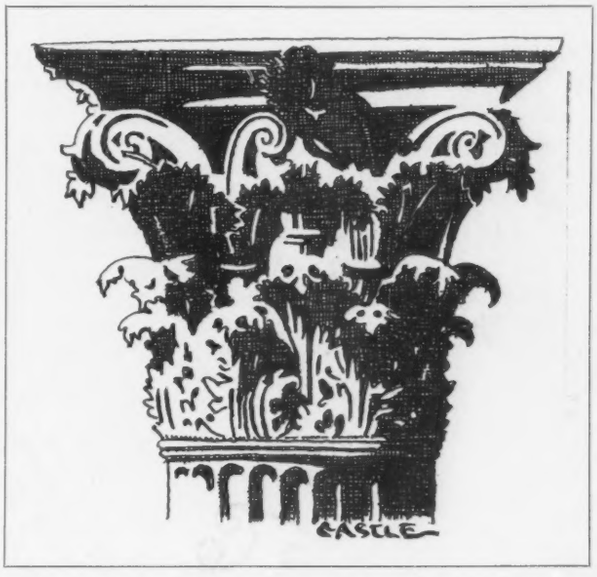
Subjects in the South Kensington Museum. Drawn on a sheet 10½" x 8"

An Architect's Notes on Pen Drawing, 4

By Sydney E. Castle, F. R. I. B. A.

Hunting for pen food among the reliquiæ salved from the past has a gripping fascination of its own—not because it happens to bring a little romance, but because it happens to bring a lot of fact. And the ancient joiner of Gothic days ensnares our affections like a misty landscape. Some latent instinct responds to a magnetism; his medium, perhaps. Wood has a warm touch and a friendly voice; and when man elects to handle it with charm and character, our eyes might well be ears straining to catch every syllable of a thrilling tale.

Quiet, craft-loving, moody fellows, these old ecclesiastic wood-whittlers! Our hands remain idle while our thoughts stretch. Queer, these speculating reflections on a press-less, nameless time! We find ourselves imagining what might have been told had jealously preserved copies of say *The Plantagenet Herald* or *The Caxton Times* been possible. Yet, in larger thinking, we wouldn't have them for the world. Shorn of identity, a peculiar dignity surrounds beautiful work; dignity a name might easily jar. The planetary Juliet echoes. To be sure, what *is* in a name, or, to extend, a possibly disfiguring life? True we may grin at the trite human blended with the divine immortal when sage biographists tell us of Warwickshire poaching and carousing bouts; but it hardly contributes to the exquisite language of Venus and Adonis. In like manner, if someone could tell us that the woodcarver who just now captivates us divided his carving passions with malt, the fair sex, or other people's property—died inside candles or a rope—the evidence of the soul would gain or lose little by the evidence of the flesh.



CAPITAL AND BASE FROM CIRCULAR TEMPLE OF MATER MATURA, ROME

Reproduced at original size .

There is charm and mystery in work left to speak for itself alone; and in the records of bygone men wrought in wood, we are perfectly content to build the human element for ourselves. Mosquitoes in significance, names would no less begin by irritating and end by boring. Rises a Chinese anecdote.

"What is your name, carver?" . . . "Alas, I have forgotten!" . . . "Do you carve for your living?" . . . "No, I live for my carving."

My apparent digression wants no apology. It is a wide but connected loop. It is all in the march of an architectural pen—a pen anxious to probe surfaces and interpret mind as well as matter.

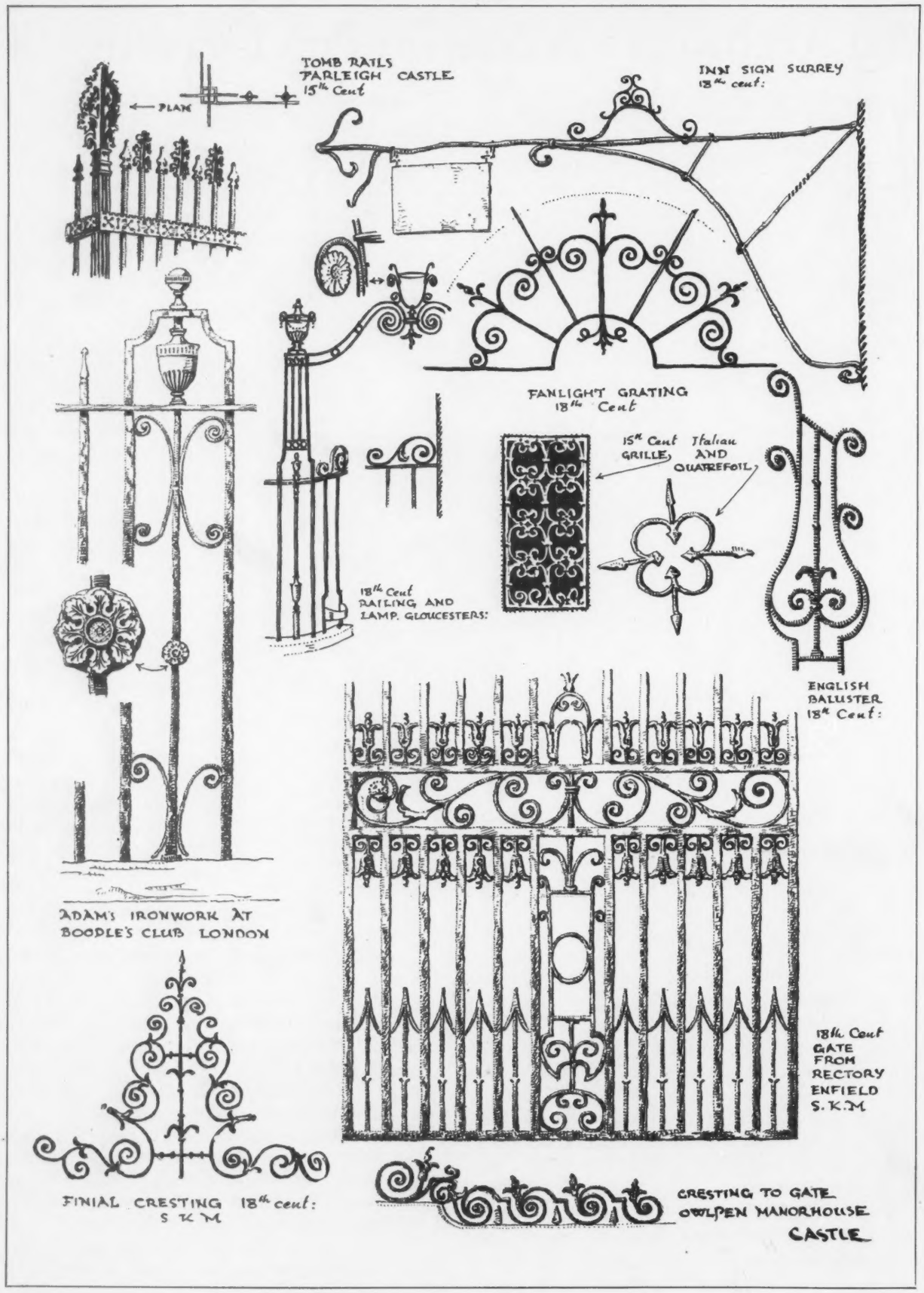
Pen-and-ink drawing cannot be photographic, and doesn't want to be. It must boast mind as well as eye. And therefore, as affecting light and shade, color and technique, the delineator who would catch the character and spirit of antiquity must cut well below the surface and loop as I have seemed to loop.

It is easier to sense charm than convert others to your way of thinking. For example, I would like to detain specially with the 13th century oak chest, among my sketches shown opposite, and begin by a confession.

Though I sat in front of that simple pale oak masterpiece long enough to congregate round me all the peppermint-crunching children in the museum, I could no more pass it by today without stopping for a friendly eye "how d'you do" than I could pass a hectic football match.

Before my pencil messed round to gather up my proportions prior to the children referred to, I stared long and fixedly at this chest. Just a plain box arabesquing with three geometric, almost Moorish medallions. Not long since I had teased out the busy fourteenth century "knyghte and fayre ladye" panel, also reproduced opposite, a feat of patience which had no less than excited an onlooker to inquire if I had "done it be 'and," and caused me to assure him that, my not being nearly nimble enough to tackle the job with my feet, such was the case. Yet, in spite of my fiddling some sort of tune out of a positive shambles of carving, here I sat—funking a plain box!

Why? Because that box went far beyond the obvious. It charmed me, and a stupid feeling of "I don't know why I love you but I do" numbed my wits. Someone respected and learned had intimated that the lid, in one piece and not confessing a single flaw or warp, was unique: I knew that the decorative



PEN-AND-INK DRAWINGS BY SYDNEY E. CASTLE

Drawn on a sheet 11¾" x 8½"

secrets of the circular panels merely awaited close investigation. Yet something in the tout ensemble eluded my describing wits. And for the moment that chest more than charmed me—it took almost alcoholic effect, in that I found myself deciding that were everybody's avaricious desires like my own, the red-coated, Crimean-busbied guards would be withdrawn from the Crown Jewels at the Tower and ranged with drawn bayonets round this queer old coffer.

Hence the magnitude of the task set my pen.

"You've been mighty glib with a mass of fuss," it seemed to challenge. "Now spread your wits with your fancies about me."

Well, well; it hardly matters how I extricated myself or acquitted myself of the task—save that when my struggles ended most of the hundred-and-one tricks of technique in my bag had remained there. The object, in *puris naturalibus*, had enslaved and held me until I found myself grinning back at my youth, when a schoolmaster had convulsed the rest of the class by expressing the considered opinion that the only thing I could successfully draw was *snow*.

My critic is probably past unfavorable comment; so *de mortuis* and the rest of it. But after flirting with the intriguing charms of this chest, I could have made a wordy mess of that schoolmaster. I could have impressed on him that snow, of all things, is the most difficult thing to draw in the world. Why? Just this: because the eye says it is and the paper says it isn't. Thus with the pale but definite claims of this plain old chest.

In earlier joinery, when handworking takes a marked character and stains and paints are absentees, grains invite considerable pen interest. Merely wiggling rivers and tributaries over wood surfaces to eradicate transparency is very well for the purely decorative or mechanical drawing; but there is a deeper story in these old grains. Sometimes the oak surface undulates smoothly: sometimes it is coarse and time-ridged. We encounter close, figured, and streaky grain, shakes, splits and worn and bruised edges—all of which lend vital and peculiar character.

Charm, too. Personally, I gobble up almost as much fun from the plain surfaces as from the traceries and reticulations which often adorn them. And I write as one who has cracked many a noisy whip over empty shafts. With my line as wobbly as my outlook, some of my early renderings of the antique less submitted a case for the ancient and venerable as the alcoholic or rheumatic. Doubtless tricky; but as wide of the mark as a bull in a boudoir.

It is far less easy than Merry Christmas drawing. For one thing, there is a material to describe. Outline or ornament in wood wants some sort of assistance. The inset sketch of a capital, for example, is starkly stone—and cold. Had I veined it, it would have turned into marble—moreover *remained* cold, which wood never is.

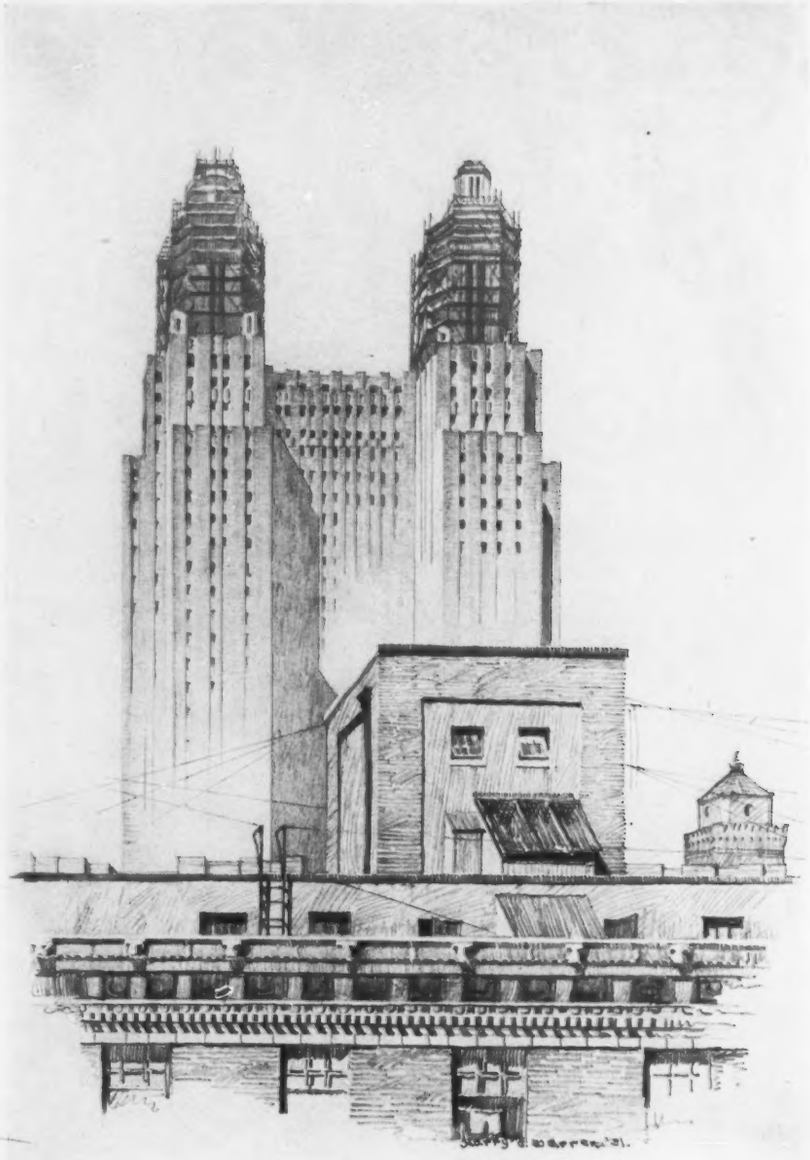
Thus a large contributing factor in old joinery-craft lies in the wood itself regardless of emphasized embellishment. It has a nature, a spirit of its own; and the architectural pen draftsman has much to learn from it.

Now let us pass along in our pen studies of wood-craft to a period when names began to connect with applied arts and crafts—when other than prodigious genius, monarchs, distinguished church and statesmen, littérateurs, and men-at-arms sent their names forward to gamble with posterity—and prepare to fit an even finer nib to our pen.

For we approach a carving tool that threatens to dislocate it.

TABERNACLE PRESBYTERIAN CHURCH, INDIANAPOLIS, INDIANA, FROM A PEN-AND-INK DRAWING BY F. H. STAHL

J. W. C. CORBUSIER, ARCHITECT—ROBERT FROST DAGGETT, ASSOCIATE



THE NEW WALDORF NEARING COMPLETION

THE TOWER OF THE LEXINGTON, NEW YORK

SKETCHED OUT OF THE OFFICE WINDOW BY HARRY G. WARREN, ARCHITECT

SKETCHED OUT OF THE OFFICE WINDOW BY HARRY G. WARREN, ARCHITECT

How to Find a Job During a Depression

By Royal Barry Wills

One of the most discouraging parts of my work as an architect, during the present depression, is interviewing the unemployed draftsmen who come into my office to ask, "Are you hiring any men?"

And the most unfortunate part of the business is not that these men are out of work, but that they are taking the least likely way of getting work. The man who simply asks if any men are being hired is trusting only to the slender chance that he may arrive in an architect's office at precisely the moment when a new man is needed.

"But if I need a job," you may ask, "what better way is there of getting one, than to go out after it?"

Going after the job is of course the way to get it, but how you go after it is the really important thing. The man who is looking for work is a salesman. The "product" he is selling is his service. He should use the same principles of salesmanship that bring success in other business. He should make his service appear distinctive and attractive. He should present it in an unusual and interesting way. He should study his prospect's requirements, and try to fit his service to the architect's needs. Let me illustrate what I mean.

The other day, when a draftsman asked me the usual question, I replied by asking him, "What can you do besides drafting?"

I finally drew out of him that he thought he could sell architectural service. He knew several people up in the country who were planning to build, and he said he thought he might be able to swing some of their business to a Boston architect, if he could find a firm to represent. When he told me the kinds of buildings that were to be built, I referred him to some of my friends who I thought would be interested, and started him out with new courage.

Instead of selling drafting service, which most architects do not need now, he is selling sales service, which most offices would be very glad to get. By giving a moment's thought to his capabilities, he was able to fit himself into the architect's picture, and I have no doubt that he will succeed in finding a job.

Today is the age of specialists, and, quite often, an architect who has no need for an ordinary draftsman is looking for a man who has special ability in some particular line. He is willing, moreover, to pay a premium for his service.

A Boston draftsman, who had no work, recently used his spare time for making measured drawings of some of the fine old Colonial houses near the city. He then designed a series of small Colonial homes, using the authentic details of the old houses to get his atmosphere, but rearranging the interiors to meet modern living needs. He showed his portfolio to one of the leading architects who specializes on Colonial houses, and immediately got a job at considerably more money than he had received before. By a little original work and imagination this man lifted himself out of the draftsman class, and made himself an expert in a field which had always interested him.

Since any one who is looking for a job is essentially a salesman, the best thing he can do is to find out all he can about how to sell. Obviously, the first step is to study carefully every available book on how to sell and how to get a job. Probably no book over ten years old is of any real value. Most of the older books stress qualifications like honesty, which we take for granted nowadays. William L. Fletcher's book on *How to Get the Job You Want* is one of the best books I have seen on this subject.

In studying books on salesmanship, you will find that in order to make a sale you must be thoroughly familiar with what you are selling, and you must know your prospect and be able to show him how he can profit by using what you are selling—two points which were illustrated by the stories above. You must also know how to locate your prospects and size them up; how to win their interest and arouse their desire to buy; and finally, how to close the sale.

You have, very likely, canvassed the architectural field thoroughly, without any apparent possibility of getting a job—for it is an unfortunate fact that probably only about a quarter of the draftsmen who are unemployed can possibly find work under present-day business conditions. But do not let this discourage you. There are many other lines of work where architectural experience can be used, and though you may not be able to land what you are looking for now, you may get something even better.

I wish I had all the figures on the architectural department of my own class at M. I. T., for I think they would show a surprising number of men in other lines than architecture. Several, to be sure, are architects, and some are designers and draftsmen; but of my close friends, one is an efficiency expert, another a cartoonist, while others are respectively, head of a flooring company, contractor, etcher and architectural delineator, architectural renderer, and editor of an architectural magazine.

There is one good thing about depressions which few people seem to realize. That is that many men who have theretofore held only mediocre positions discover their own potentialities during such times and succeed in establishing themselves permanently in their life work.

To quote from personal experience, my own architectural office might never have been opened, had I not lost my draftsman's job back in 1920. During the 1920 depression, I sold neckties, and while I was working at this apparently fruitless job, I had time to think over my problem and plan ahead. I realized that if I kept on as a draftsman I would always come to periods when I was entirely without work, whereas if I had an office of my own I would probably have at least a small amount of work to keep me going, even during bad times. Because of this realization, I opened my office, and am now much better off than if I had never lost my drafting job. So, in some ways, my work selling neckties was the best job I ever had!

And now, with all business to choose from, how should a man with architectural experience go about getting a job?

The first thing to do is to analyze yourself, and discover what kinds of services you have to sell. If you conscientiously fill out an analysis chart, such as the ones used by employment agencies, you may be surprised to find out how many things you can do besides architectural drafting. Write down all your qualifications—answering such questions as these:

What studies did you like or dislike while in school?

What are your hobbies?

What clubs do you belong to?

What types of books do you particularly like to read?

You will find that the very act of analyzing yourself seems to create ideas. Simply setting down the fact that you are interested in sketching suggests that you can perhaps make a little money by designing Christmas cards for owners of new houses. I know draftsmen who have done this. If you like to sell, there is always plenty of opportunity to sell on a commission basis, and a selling job is not to be turned down. Particularly if you can sell any architectural items, your work may give you many useful contacts as well as experience in meeting owners and contractors that will prove to be invaluable training later on, should you ever wish to open your own office.

The next thing to do is to list the possible fields where your abilities might be profitably used. First, list all the things you have ever done, or would like to do. Then go to the library and check over a bibliography of trade books and trade papers. In this way you can see before you practically all the lines of business where there might be an opportunity.

When you have finished, you will have two lists: one containing your strong points, the other containing the possible fields where you might find a job. This second list might read: Surveying, Illustrating, Selling, Window Dressing, Advertising, Writing, Teaching. Though it may be very miscellaneous, it will give you a start.

The third thing to do is survey the market for sources of prospects. Start by questioning your friends. Do not go to them apologetically, and ask them to help you. Try to make them feel that you can be of real service to them, or to some of their friends. Be specific when you tell a friend or neighbor what you are looking for. Ask your friends to take up the matter with some of the executives they know, and to get you an opportunity for an interview. By direct contact such as this you will save a lot of time and probably come nearest to getting what you want.

After you have canvassed the field of people you know, you can increase your prospect list from various other sources such as business acquaintances, directories, mailing lists, employment agencies of schools, colleges, and clubs, new corporations, newspaper articles, etc. Be sure to check over your telephone directory carefully, as this is probably the best and easiest source of prospects that you have.

When you have done this, you will probably find that you have the names of more people than you can possibly call on. While a personal call is of course the only way to close a sale, you can probably use a campaign of personal letters to great advantage in getting interviews. It is surprising that few draftsmen go after a job in this way, yet it is well worth while to send out three or four hundred letters. A good letter, individually typed on good stationery—never mimeographed—should draw 30% replies, with the possibility of 1% offers of jobs.

Before writing a prospect, learn all you can about him. Remember that form letters are never as good as personal letters. Be sure to make every letter interesting and full of facts, not generalities. Bear in mind that you are selling your service, and keep the interest of your prospect to the fore. He is interested in his business, not in you—and your letter should stress your ability to help him increase his business or do his work at less cost. Do not waste words in preliminaries. Tell your prospect in the first sentence that you believe you can be of real service to him, then in the body of the letter tell him specifically why, giving all necessary information about yourself, citing important jobs you have held and work you have done. Keep your letter brief, and make it interesting, for the wastebasket is always near at hand. Close by trying to get an interview, which is about all you can expect a letter to do for you.

If you feel you cannot write a good letter, write the best letter you can and get an advertising friend to help you improve it. Do not have him actually write it, but simply get his advice and suggestions. Your letter should express yourself and no one else.

These plans for getting a job may sound commonplace enough, but they work. I know many men in the architectural profession who have used them successfully.

For example, one man who was discouraged with having nothing to do conceived the idea of making a background or frame for showing a new kind of rug which was being advertised. He designed this frame, secured a letter of introduction to the president of the rug company, and presented his idea. The president saw at once that the new frame would display the rug to good advantage in store windows and so increase his sales. He built two or three hundred and paid the draftsman well for his idea.

Another designer who was out of a job had always

been irritated by the standardized store fronts of a certain group of chain stores, and had always believed that he could design a better and more attractive one. With spare time on his hands, he designed this new store front and sold it to the chain store company, receiving several commissions.

A man who keeps his eyes open can often discover such opportunities to sell architectural service. Though the individual jobs may be small, they may lead to others, and may eventually be the foundation for an architectural office.

The daily newspaper contains hidden between the lines many opportunities for making money. I marked ten such chances in a paper the other morning. One of these was an insignificant item telling that the Old Charter House was being torn down. I went to the building, and found many bits of wood finish and hardware that I knew would have a ready market among those who love antique things. I paid a ferocious-looking Italian $2 for one of the old cranes, which I sold soon afterwards for $10. This at least paid me well for my trip, and proved that money can be made from newspaper items.

The problem of the recent graduate and that of the older man with considerable experience are in many ways similar, but the younger man usually has the advantage that he is not driven by necessity to make a living for a family as well as for himself.

For this reason, the younger man with a part-time job, or out of work, can with profit continue his studies. A professional man usually knows too little about business methods and selling. If you are one of these, take up the study of general business subjects. There are countless books and magazine articles of value. You can perhaps combine selling work in the daytime with a correspondence course in the evening, and thus lay the foundation for a successful business of your own later on.

If you are interested in sketching, or in making measured drawings, now is the time to do this work. Leisure time spent in study is never wasted, whether or not it be immediately remunerative. If you have saved enough money, study abroad if you have not already done so. You will return better fitted for your work when business conditions are improved.

The older man has more experience and more contacts to fall back on in getting a job, but his greater responsibilities require a larger salary and often necessitate some sort of immediate work.

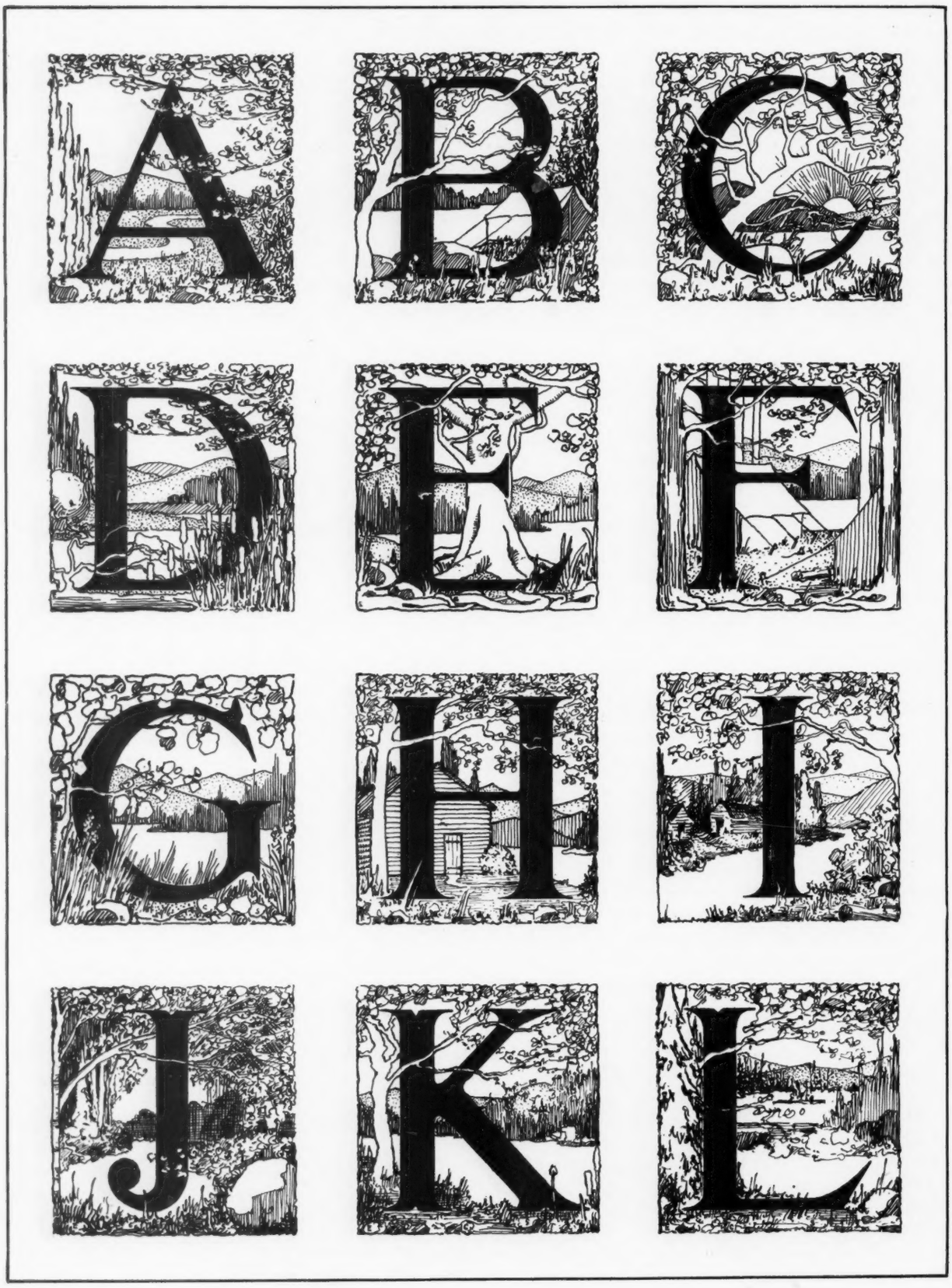
His special problem, if he is over 45 or 50, is to make an advantage of his experience rather than a disadvantage of his age. A young man's enthusiasm would be out of place in an older man, who should exhibit such qualities as judgment and balance. In making his contacts, he should be careful to put a certain amount of "tone" into his application for a position. For this reason, it is considerably wiser for an older man to write a letter than to apply in person where he has no point of contact.

For the experienced man with fairly wide contacts, this may be the time to open an office of his own. It is much wiser to open an office at the end of a depression, than at the end of a boom. A man who starts out under boom conditions, ordinarily goes down when the boom is over; but the architect who opens his office now can compete on more or less equal terms with the average architect during the next period of prosperity. By starting in an economical way, using one's own home as an office, and writing one's own letters, there is little chance of losing out. In the beginning, it is wise to work up small jobs, with which the larger offices do not compete. This work may not be very remunerative, but at least it will tide one over the depressed period, and will enable a man to find out definitely whether or not it will pay him to keep on by himself.

Another idea is: if you have a little money and are now renting your house, build your own home. A good many draftsmen are handy with tools, and can build houses with the help of a carpenter. In some cases, it is possible to build a small house entirely on the mortgage. Being your own architect, you save the architect's fee; being your own contractor, you save the contractor's profit; being your own foreman, you save the foreman's pay; and where you are right on the job, you should be able to build it cheaper than the average builder who cannot be on the job all the time. Since the actual labor and materials are all the cost you pay, you might even be able to get a mortgage which would pay you a small salary for your work in designing and supervising the house. It may seem like quite a serious step for any man who is out of a job to take; but the worst that could happen would be that you would have to sell the house. If your design is interesting, your location good, and your house the type that people want, you should be able to sell it at a profit, even during a period of depression. However, it is not a step that should be taken without some certainty beforehand that it can be carried through successfully.

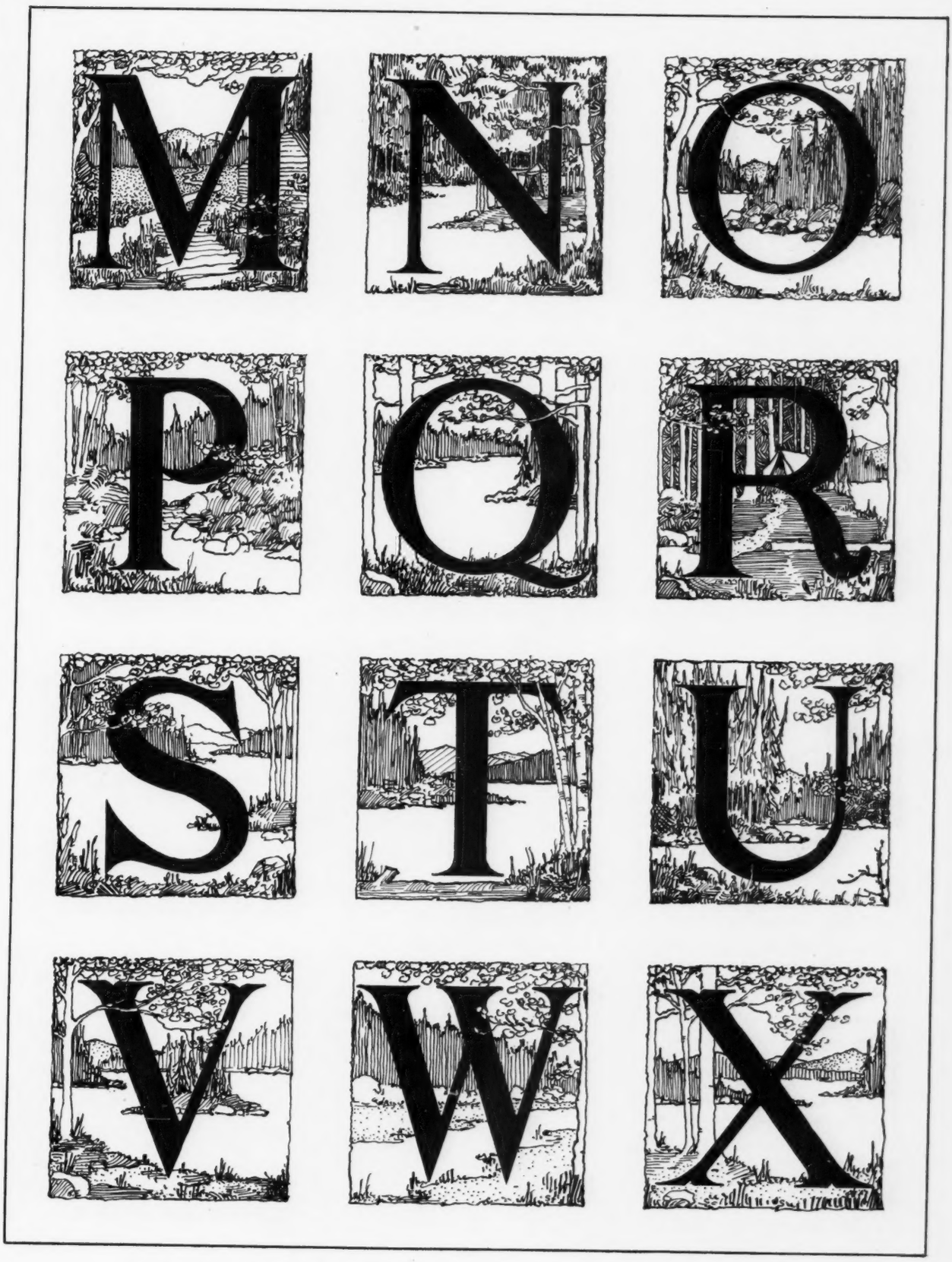
Whether you are old or young, a job to get a job is often a good thing. If you take a position selling to architects on a commission basis, you will get in touch with all the architects in a wide area. While being paid for making your rounds, you can keep posted as to which offices are busy, and may, at the proper time, be able to make a valuable and permanent connection.

Trying to find a job during a depression is, at best, a difficult and nerve-wracking task, but those who have gone at it in a systematic way have succeeded. If you seem to be at your wits' end, just take enough time to write down fifty ways either for getting a job, or making some money, using the ideas in this article as suggestions. Go over your notes, and select the most likely lines of attack. Approach the problem from the viewpoint of the men you are trying to sell—work intelligently, earnestly, optimistically—start something and keep at it—and you will be successful!

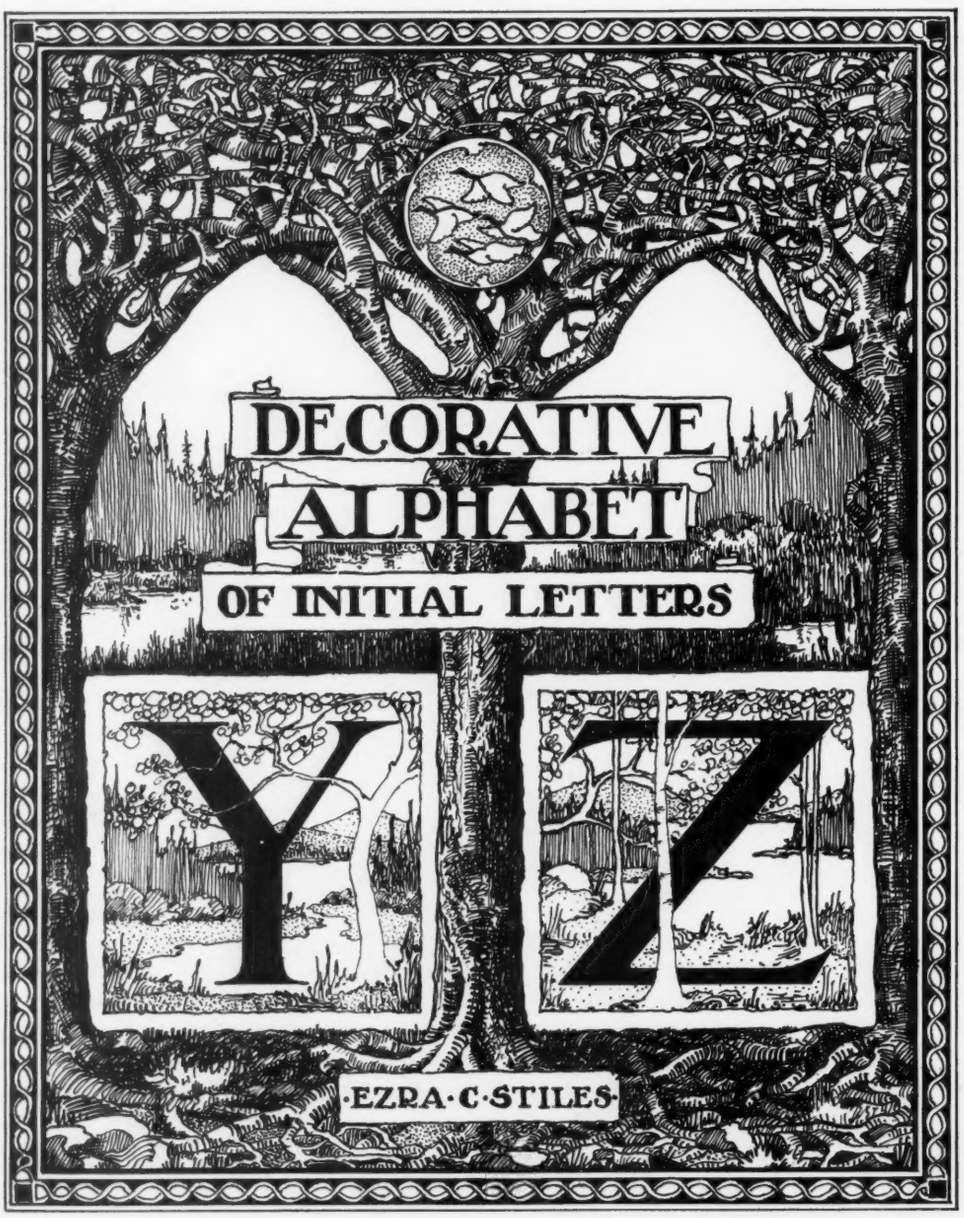


AN ALPHABET OF INITIALS DESIGNED BY EZRA C. STILES, LANDSCAPE ARCHITECT

A DECORATIVE ALPHABET OF INITIALS



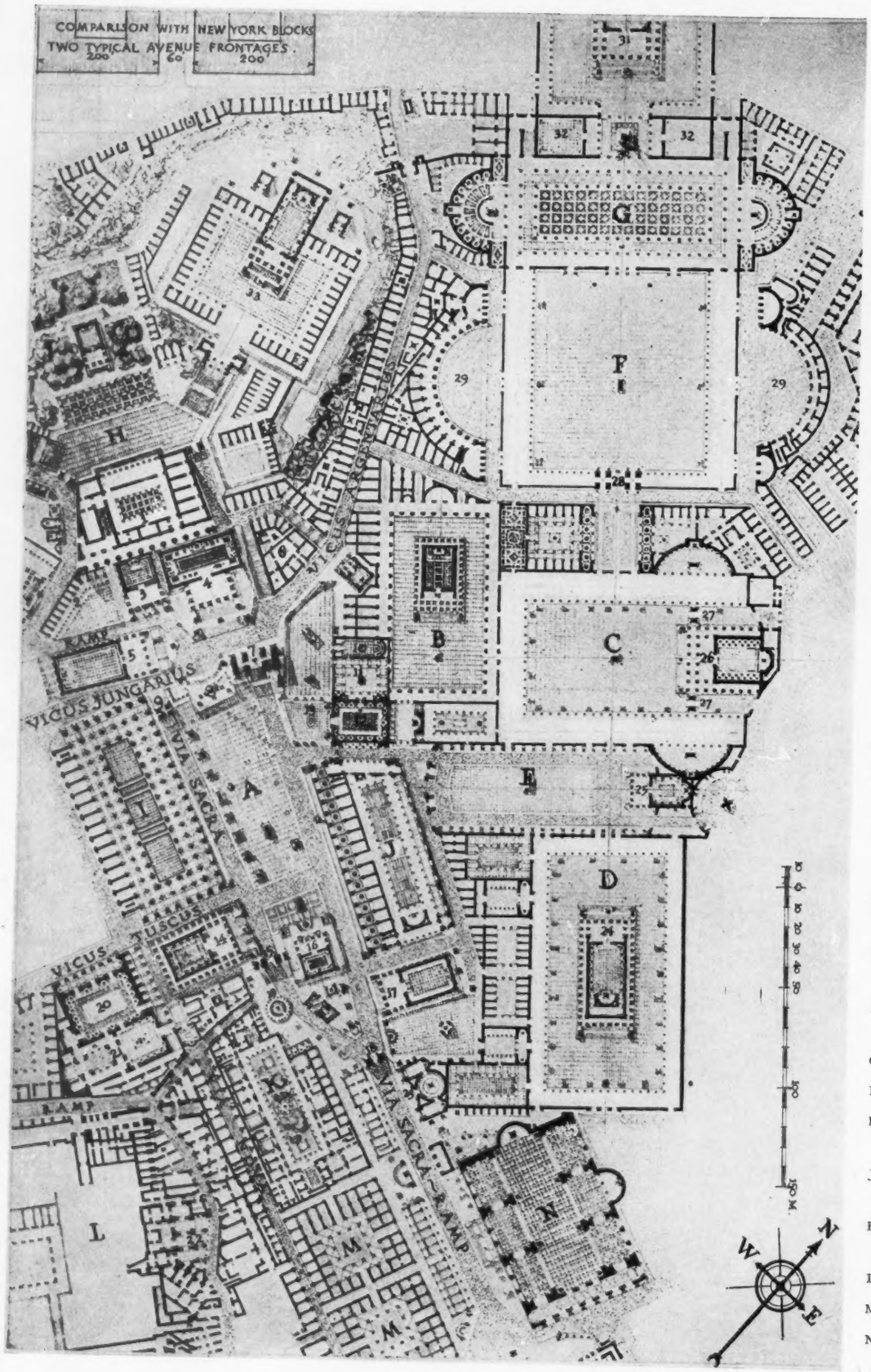
AN ALPHABET OF INITIALS DESIGNED BY EZRA C. STILES, LANDSCAPE ARCHITECT



DRAWN IN PEN-AND-INK BY EZRA C. STILES

A STREET IN JERUSALEM

FROM A PEN-AND-INK DRAWING BY JAMES IRZA ARNOLD



THE CIVIC CENTER OF ANCIENT ROME ABOUT THE TIME OF CONSTANTINE

Based on a plate from Gromort's "Choix de Grandes Plans Executées," retouched by Mr. Swales to accentuate the units of city planning.

A—ROMAN FORUM

B—FORUM OF JULIUS CESAR

C—FORUM OF AUGUSTUS *(Octavian Cesar)*

D—FORUM OF VESPASIAN

E—FORUM OF NERVA *Transitorium*

F—FORUM OF TRAJAN

G—ULPIAN BASILICA

H—CAPITOLINE HILL

I—BASILICA OF JULIUS CESAR

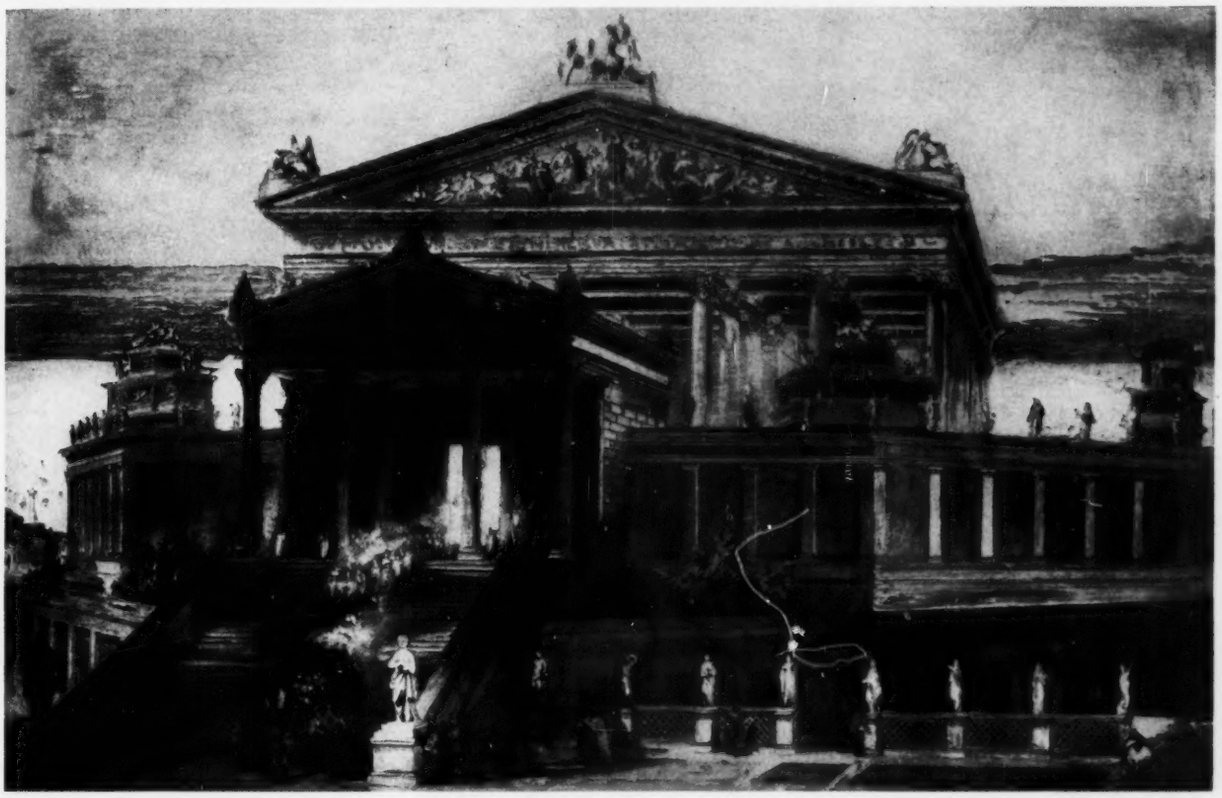
J—BASILICA OF EMELIUS

K—HOUSE OF THE VESTALS

L—PALATINE HILL

M—STORES AND SHOPS

N—BASILICA OF CONSTANTINE



RESTORATION BY C. R. COCKERELL OF THE TEMPLE OF JUPITER CAPITOLINUS, ROME

The Architect and the Grand Plan

4—Replanning of the First Modern City—Imperial Rome

By Francis S. Swales

Editor's Note:—*Parts 1, 2, and 3 of this group of articles appeared in the March, May, and November issues of last year. Other parts continuing the discussion will be presented in the near future. The author is well known as an authority on the subject.*

Rome, a city largely replanned twice and rebuilt piece by piece to certain fixed lines with the apparent object of unified magnificence, presents two long periods of high development. The first, that of the dictators and emperors culminating at the middle of the Fourth Century with its greatest destruction by Alaric, in 410. The second, about a thousand years later, was that great period of reconstruction during the Renaissance, which began a few years after the destruction of Constantinople by the Turks, in 1453, and spent itself about three hundred years afterwards, while producing the main ideas upon which theory of replanning in modern cities is founded.

The ancient city's early developments are so complicated by periodic partial destructions, chiefly by conflagrations, but also due largely to various forms of strife leading to demolitions and reconstruction upon the debris, that to follow the full course of its change from a rank old growth of huts and multiple dwellings to a highly organized city is likely always to remain an impossibility. Rome is the outstanding example to remind us that,

> "Cities and thrones and powers
> Stand in Time's eye,
> Almost as long as flowers
> Which daily die,
> But, as new buds put forth to glad new men,
> Out of the spent and unconsidered earth
> The Cities rise again."

Their tendencies to rise again in new form on old sites, to replan old areas to meet new conditions, experiment with and to observe worth of traditions, is nowhere better illustrated than by the capital of the first organized world center. Rome was the scene of the great struggle to eliminate the theocrasies of a multitude of gods; to solve problems of sociology and politics, finance, internal and international economics,

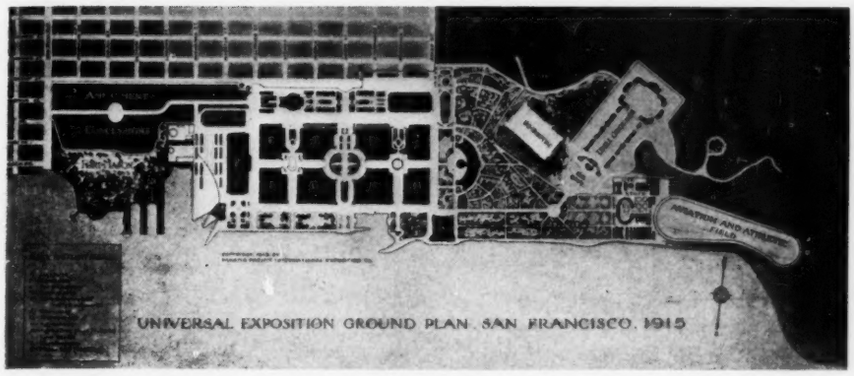
and æsthetics. Rome was the formulator of modern law and order.

Its history—as literary historians, poets, satirists, and fiction writers have told it—has long been a bore to high school students and is more than a little stale elsewhere. Yet, whenever we consider anything which at first sight seems new and practical in planning it becomes worth while to glance over the problems which were tackled and the way they were solved by the Romans.

Roman planning, as it appears in histories of architecture, has dealt with elements of typical construction and decorative arrangement of geometrical figures of the horizontal plane of individual buildings. More recent tendencies have been to consider the true sense of architecture as implying a harmonious whole—such as a group of buildings, district, or city, in a beautiful arrangement which comprises more extended order, convenience, and amenity than those peculiar to particular buildings. In the terms of a modern railway man it may be said that the difference between the city planning of Greece and Rome is that in the case of the former "the freight and passengers came in on the same train and entered the front door, while the latter provided segregation of freight from passengers." In other words, both the chief buildings and the *insulæ*, or blocks of houses in Greek cities, generally were surrounded by streets serving all classes of traffic and all buildings faced on the streets. At Rome the chief buildings faced upon open spaces or forecourts and traffic service was carried on in streets at the rear, functioning more like the "alley" of modern cities, or the service roads of great expositions.

The World's Fair at Chicago in 1893 and the Panama Pacific Exposition at San Francisco in 1914 were scenic representations of Roman civic architecture more by reason of horizontal arrangement of the plan than by the vertical projections or elevations with their Roman style of architectural decoration of arches, orders, statuary, fountains, color, and gardens, which resulted from the general conception. It has been well said that "the most lasting bequest of Rome to civic art was . . . . an example of municipal dignity, of using large resources in a large way." Instead of a typical small-town checkerboard of streets Rome adopted a plan of units of chief buildings, each being an open place so designed as to be complete and symmetrical in itself and proportioned to the height of surrounding buildings. Each succeeding unit of construction was carried on with regard to the benefit it could derive from and contribute to that which had preceded it by obtaining and providing mutual benefits of internal circulation, reciprocal vistas, service roads or outer circulation in

THE COURT OF HONOR OF THE CHICAGO EXPOSITION, 1893—FROM A DRAWING BY MENTE CHARLES B. ATWOOD, CHIEF OF DESIGN OF THE EXPOSITION



PANAMA-PACIFIC EXPOSITION, 1915—EDWARD H. BENNETT, PLANNER

As at Chicago, this plan was Roman in breadth of conception and use of large units.

common, continuity of form, contrast of direction of plan form, unity of proportion and relation of scale in the total result. The scheme of conservation of the best parts of older construction, by so extending the new as to combine new benefits with those existing, is as characteristic of Roman planning from the time of Julius Cæsar onward as it was of the great Theban planning of the period of its "New" Empire.

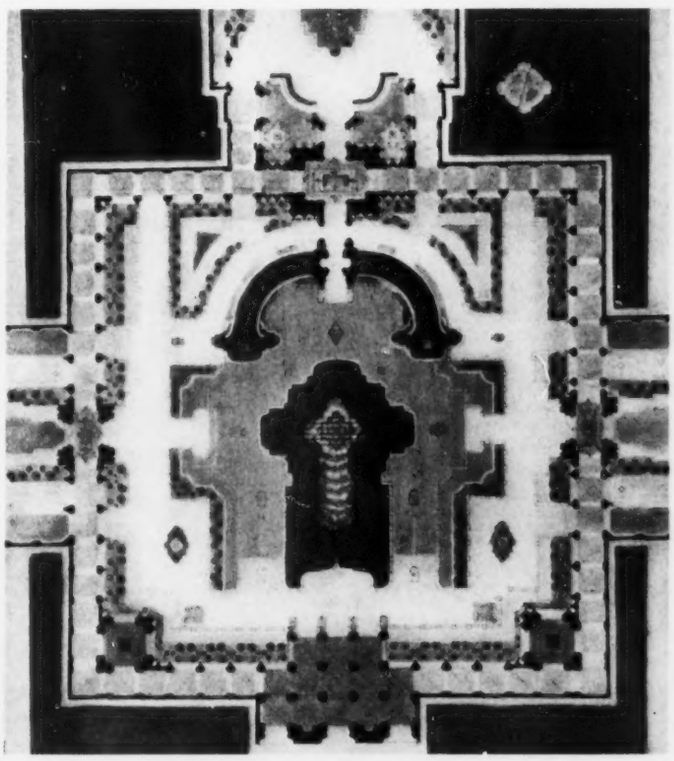
The grandeur of architecture that was Rome under the Cæsars was not evoked mainly out of the borrowed plumage of the Greeks nor a mere change from post and lintel to arch and buttress construction. It was a new evolution of principles that were old before Greece came into existence; of traditions of philosophy of design passed down through ages of builders; that word of mouth instruction which results from experiment, comparison, analytical criticism, and conclusions reached among many men working and thinking together in practical, if not pure, reason, the complex father of invention, without which necessity would bear no fruit! Such instruction is primary guidance to useful experience in all art by which a very difficult thing is done in such a way as to cause it to appear simple.

The period of the Triumvirate of Cæsar, Pompey, and Crassus marked the introduction of formal replanning of old Rome. The undertaking ascribed to the first two was of an important and enduring nature, with some nobility of motive.

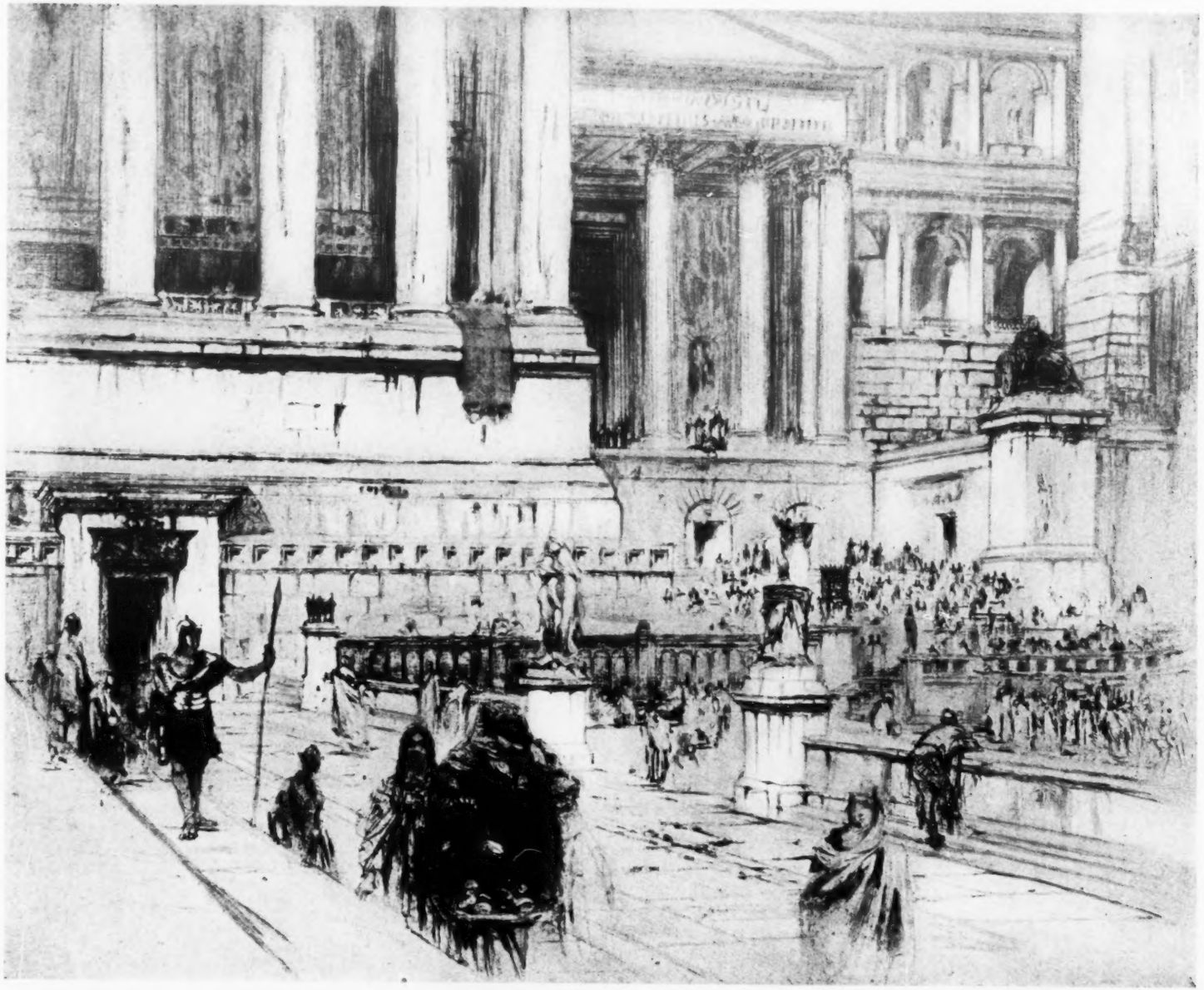
The beginning of the replanning of the heart of the city undertaken by Julius Cæsar was a means of taking up the slack of times of peace. Reconstruction of the city provided employment for his time-expired legions, turned the public mind to comparatively peaceful pursuits possessing even more glamour than war, and acted as a great force in the circulation of inflated money. By finding a new use for the currency, it prevented it from being cancelled by payments which cause deflations and "crashes." Cæsar's dispatches as general of the army show that he always thought of the comfort and perhaps the welfare of his common soldiers. No less a strategist in politics than in war, he struck at the heart of his problem by reorganizing municipal control and projected plans for rebuilding not only Rome but the ports of Corinth and Carthage. In perception at least he was perhaps the greatest architect of civic design.

His first step in replanning Rome was for the convenience of the common people: an enlargement of their gathering place, the Forum, creating it as the nucleus of that which was to become the greatest of the world's civic centres. The possibility that its architectural regularity may have been designed by an Egyptian-Greek architect in the retinue of Cleopatra, while she held sway over Julius Cæsar, affords a chance of speculation as to the primary direct influence of Egyptian planning in Rome.

When Julius Cæsar began reconstruction, the central part of the big city had become a mass of overcrowded, badly constructed, commercial buildings and tenement houses. These were an accumulation from a growth of at least three hundred years' duration—which played leapfrog along the steep hillsides and piled one upon another around the market place. Cramped between the hills, this growth had spread out into the Campus Martius to the north and into the Valley of the Circus Maximus to the southeast,



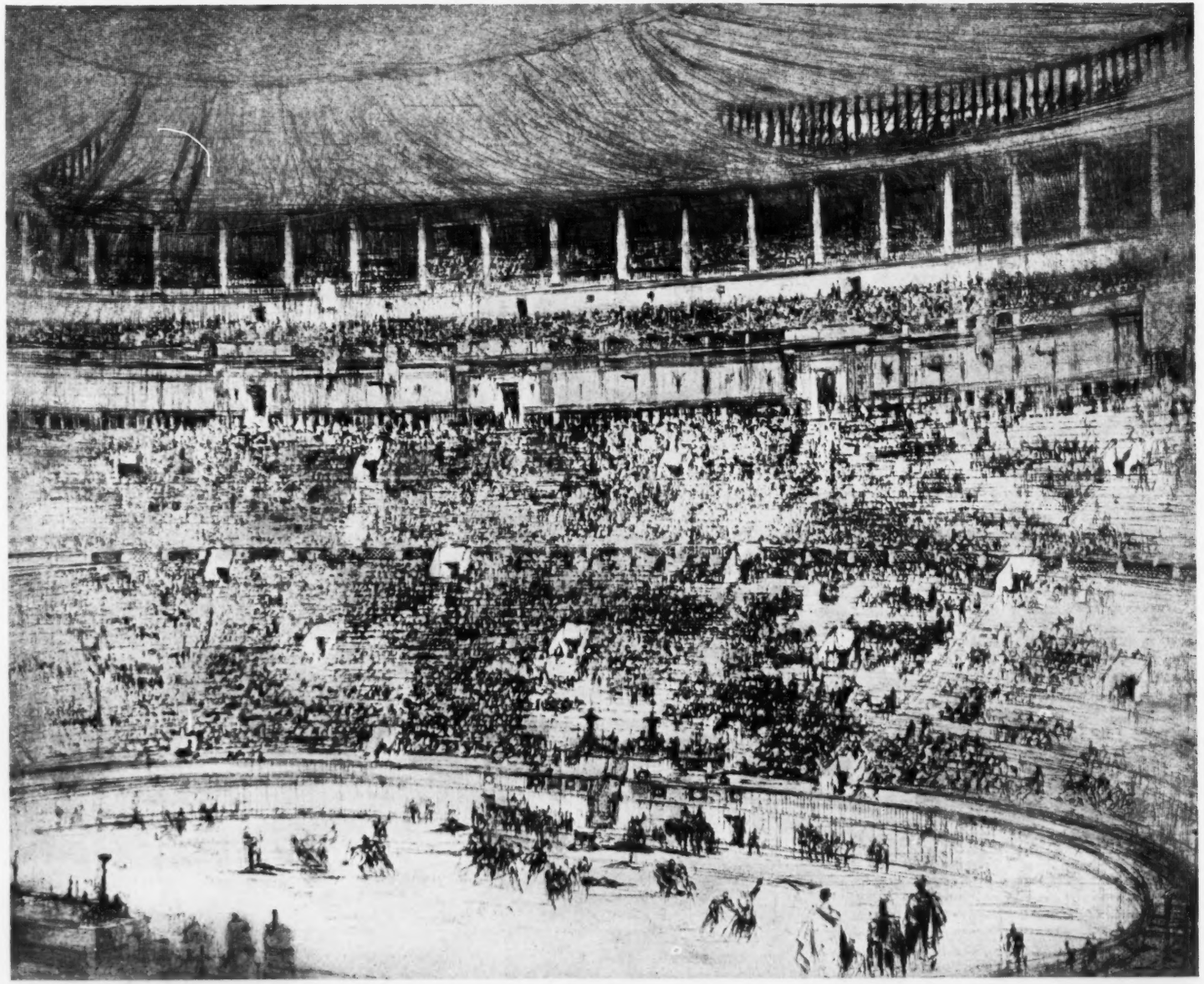
PRELIMINARY PLAN OF THE FESTAL COURT
PANAMA-PACIFIC EXPOSITION, 1915
LOUIS CHRISTIAN MULLGARDT, ARCHITECT



"THE FORUM"—AFTER THE FORUM AT ROME

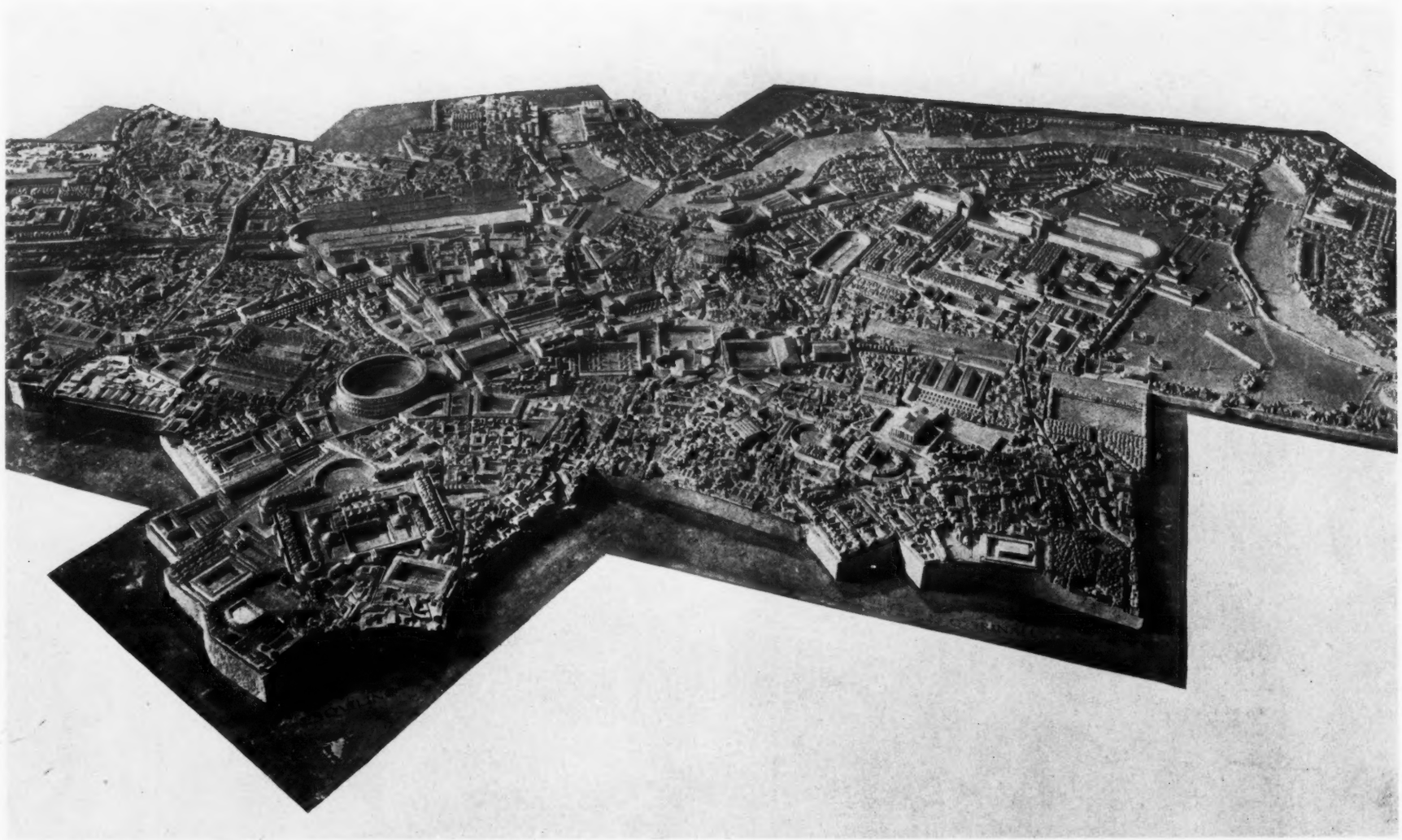
FROM AN ETCHING BY WILLIAM WALCOT

FROM AN ETCHING BY WILLIAM WALCOT



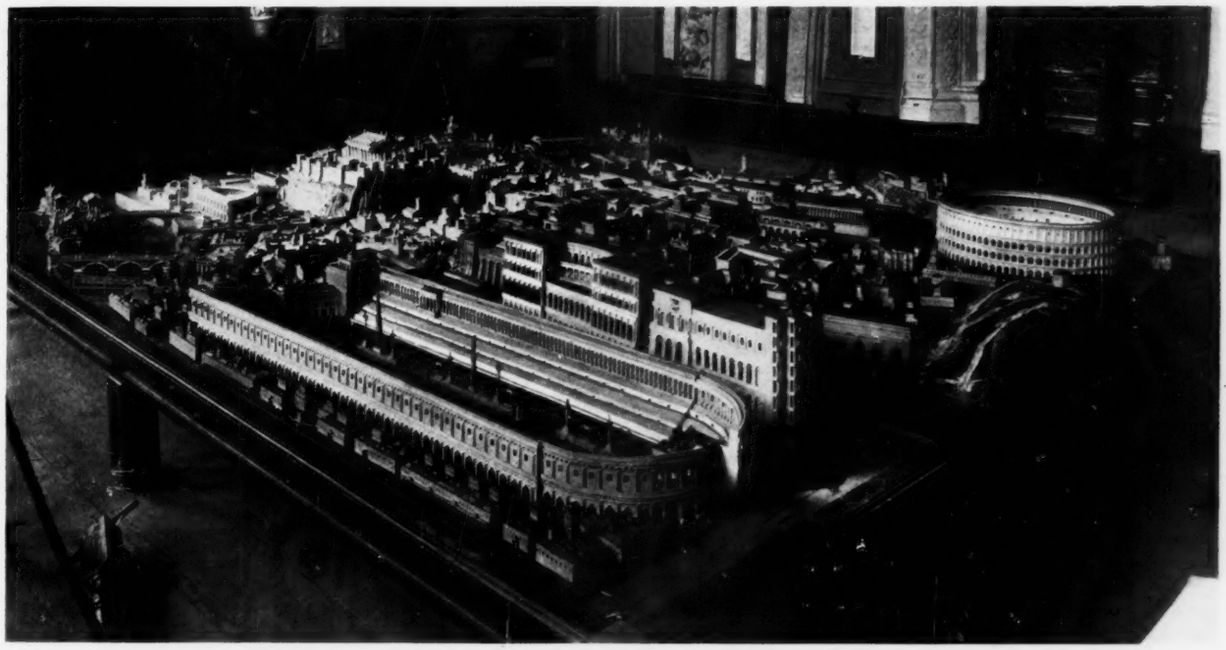
A PERFORMANCE AT THE COLISEUM—VESPASIAN'S AMPHITHEATRE—ROME

FROM AN ETCHING BY WILLIAM WALCOT



THE CITY OF ANCIENT ROME ABOUT THE TIME OF CONSTANTINE—FROM A MODEL BY PAUL BIGOT

The plan, as it evolved into the central part of a complete city in the time of Constantine, was studied into a restoration by M. Bigot about twenty years ago.



FROM A MODEL OF ANCIENT ROME, IN THE LIVERPOOL MUSEUM

and the destruction of unhealthy slums was as necessary as more space to move about in. In many respects building conditions paralleled those of several of the larger American cities of today. Cheaply constructed tenements and private houses were built or renovated speculatively and brought high rentals. Encroachments took place on the lines of the narrow streets. Great fortunes were being amassed, such as that of the Triumvir Crassus, by such enterprises. Residences of the most luxurious kind were constructed on the plateaus above. Clodius paid about three-quarters of a million dollars for his house. Cicero built his on the Palatine, which had become an aristocratic residential centre. He also built several others and was client of several architects. He mentions some of them with esteem. His architects seem to have carried on practice much in the same way as it is done today and it is probable that one of his friends among them, in private practice, planned the forum which Cæsar projected in consultation with Cicero and Oppius. Currency was inflated and high finance ruled as it does today in the United States (or did, recently) —a condition which maintained throughout the reigns of Julius, Augustus, and Tiberius, and led up to the crash of the Bank of Alexandria, in the year that Christ was crucified. It was into such condition of high cost and intense building activity that Cæsar entered with a plan to rebuild Rome on lines fit for the Capital of the Empire.

Julius started the work of extending the Forum on orderly lines conforming to architectural tradition. That it was an expensive undertaking, comparable to

ANOTHER VIEW OF THE MODEL OF ANCIENT ROME, IN THE LIVERPOOL MUSEUM

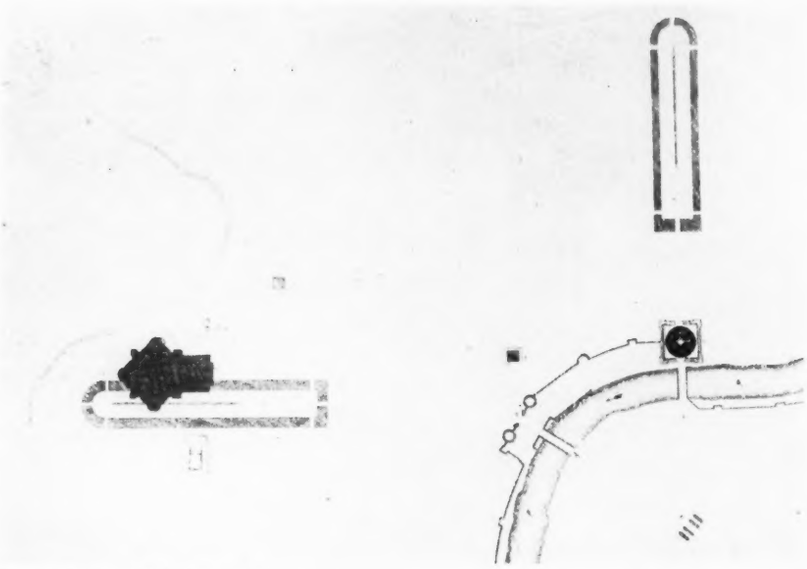
modern cost, is shown by one of Cicero's letters "written in the summer of 54 B.C." Cicero says: "Cæsar's friends (I refer to myself and Oppius) have felt no hesitation in spending [English translation] six hundred thousand pounds—about three million dollars—in extending the Forum. The owners of the property would not consider any smaller proposition. We are hoping besides to accomplish another large undertaking. We are building in the Campus Martius a covered voting hall, which will be about a mile in circumference."

Mr. Charles Moore computed the cost of the land to Cæsar as "$44.50 a square foot," or, as we should say, in New York, $4,450 per front foot, or $111,250 for each "city lot." Later events proved the wisdom of Cicero's judgment. The high values were maintained by the upbuilding of the city so that, about a century and a half later, Trajan was obliged to pay four times the price paid by Cæsar, or more than twelve million dollars, from his private means, for the adjacent land alone, on which he built his greater Forum as his gift to Rome.

Cæsar's first ostensible object included obtaining better communication between the Forum Romanum (the valley almost enclosed by the Palatine, Capitoline, and Quirinal hills) and the northern part of the city, which was partly accomplished by his successor. He regulated the bed of the Tiber and constructed the first stone *cippi*—quays or river walls—taking the form of three great steps on either side along its banks. These gave different widths to the river at different times of the year and prevented silting up, which now takes place due to that kind of designing known as modern engineering. The Tiber, normally about twenty feet deep, rises at times to thirty or more between the modern bulkheads. Cæsar also considered a project to divert the river's course in order to add greater area to the Campus Martius. This project was revived from time to time during the Renaissance and again during recent years. The persistence of the project recalls D. H. Burnham's saying: "A noble and logical diagram, once recorded, will never die."

Cæsar began the Julian Basilica which burned down and was rebuilt by Augustus. Pompey built his theatre and porticoes forming a forecourt to it in the Campus Martius at about the same time. The plans of the two groups—Cæsar's Forum and Pompey's theatre—fixed the rectangular lines of the greater succeeding works carried out under Augustus and Agrippa. It should be noted that although the best investigators are in agreement as to the approximate size and location of the fora of Julius, Augustus, and Vespasian, much excavation below existing building remains to be done before conjecture as to the exact plans can be removed.

(To be continued)



From Pistolesi's "Il Vaticano"

PANVINO'S PLAN SHOWING THE RELATION OF NERO'S CIRCUS TO ST. PETER'S, AND HADRIAN'S CIRCUS TO HIS TOMB, NOW THE CASTLE OF SANT' ANGELO

CUSTOM HOUSE, NEW YORK

FROM A CRAYON AND PASTEL DRAWING BY THEODORE DE POSTELS

PENCIL POINTS FOR JANUARY, 1932
VOLUME XIII NUMBER 1

The artist here pictures the contrast between the marble group by Daniel Chester French and the architecture, by Cass Gilbert, in harmonious soft-night effect, in blacks, in a luminous treatment of the sculpture, and greenish blues of the rich entrance. The original drawing measures about 18" x 11".

FROM A LITHOGRAPH BY JOHN M. FOSTER

AN OLD HOUSE IN PROVINCETOWN

PENCIL POINTS FOR JANUARY, 1932
VOLUME XIII NUMBER 1

This lithograph by a well known illustrator shows a free style of drawing trees which may be suggestive to the architectural delineator who has difficulty in expressing foliage. The original measures 10¼" x 14".

INTERIOR OF THE ROMAN BATH AT TRIPOLI

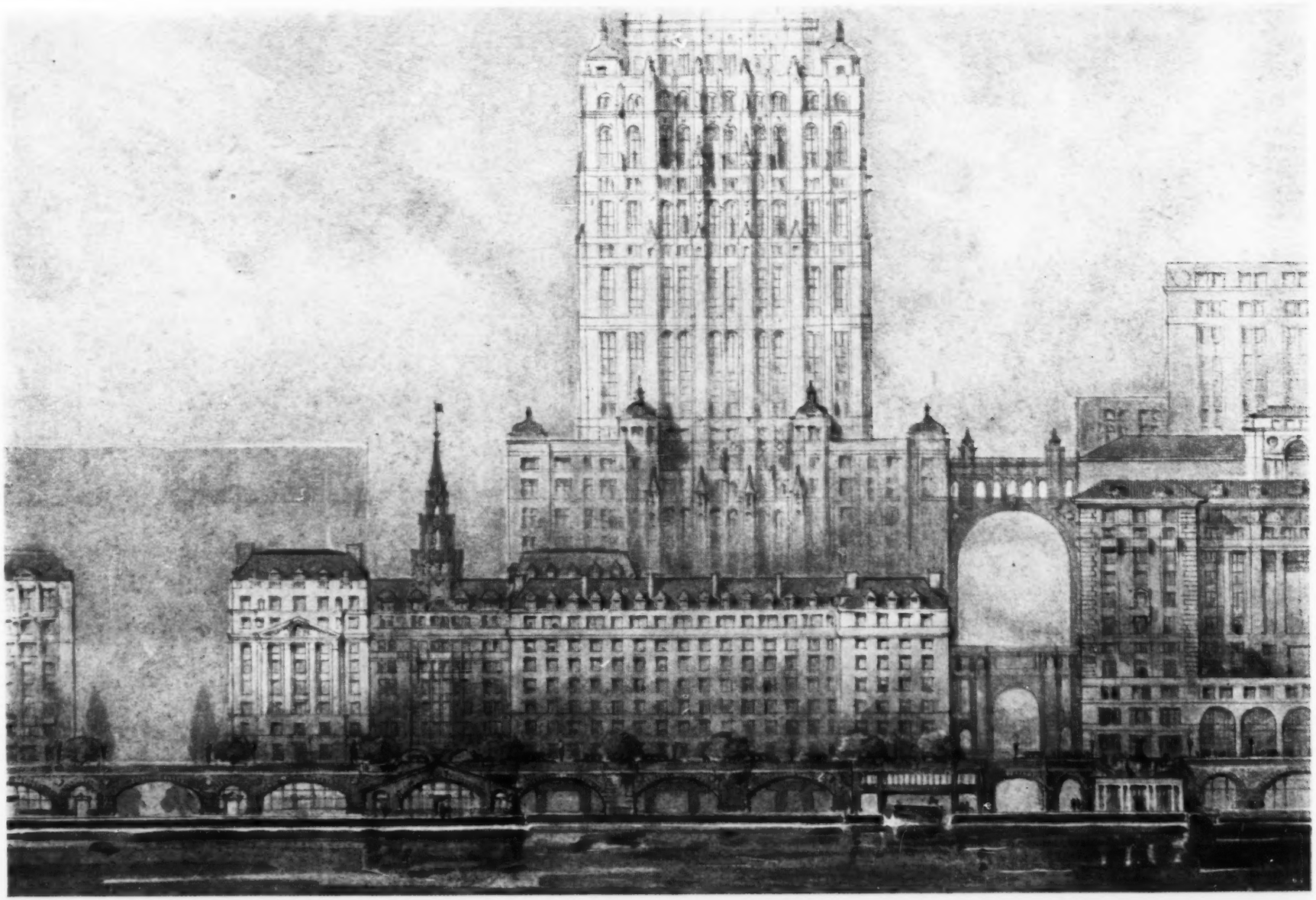
FROM AN ETCHING AND AQUATINT BY CECIL CLAIR BRIGGS

PENCIL POINTS FOR JANUARY, 1932

VOLUME XIII NUMBER 1

Mr. Briggs first etched this plate in pure line and an aquatint ground was then laid over the entire plate and bitten into the copper in several stages to give varying values. When the ink is put on a plate of this kind it actually is held in the etched depressions and it may be wiped clean and printed, obtaining always a uniform print and doing away with the necessity of any tricky wiping.

Mr. Briggs' original plate measured about 12½" x 16½"; it was worked up from George Fraser's restoration drawings of the Bath.



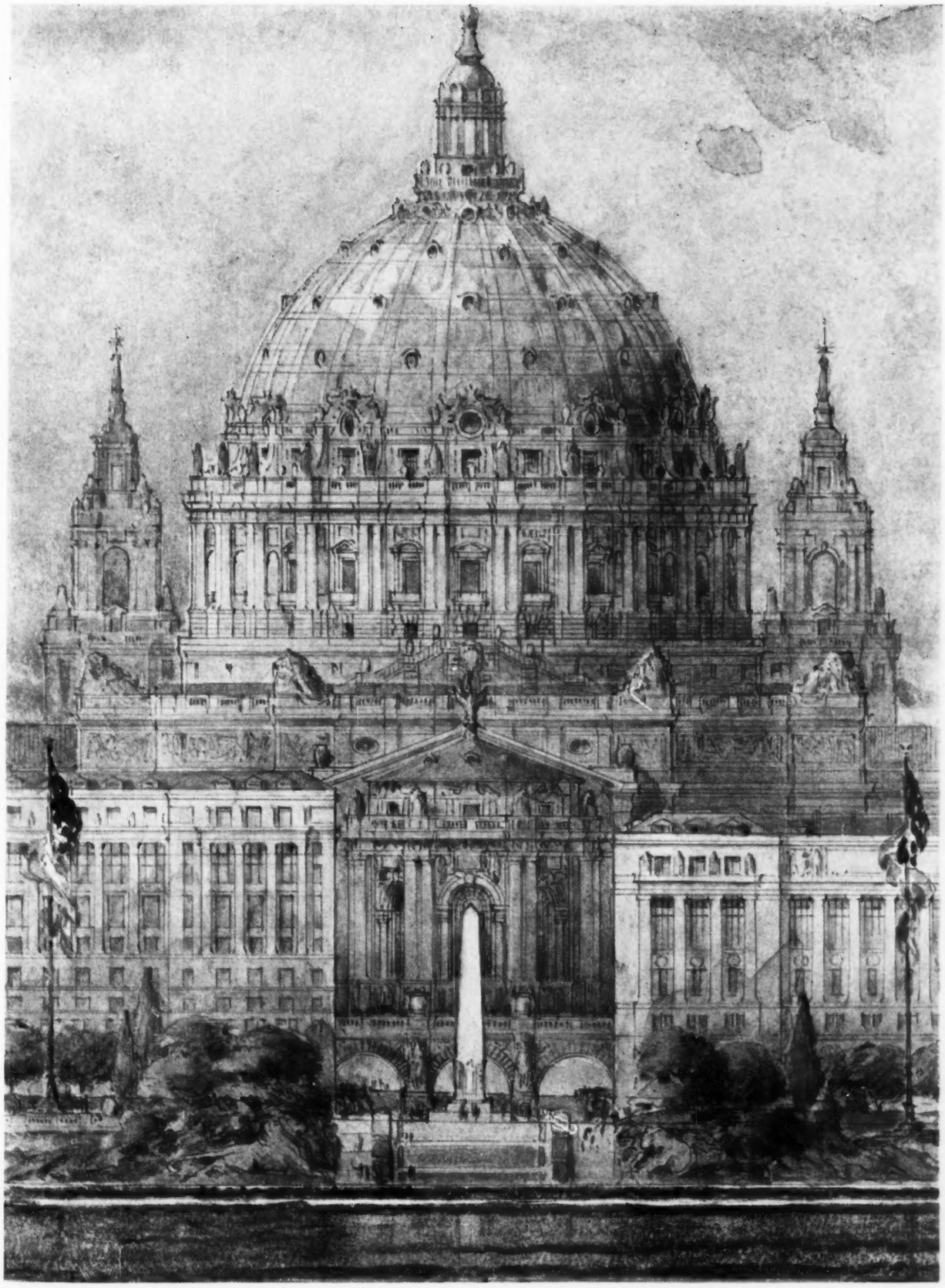
PORTION OF PROJECT FOR DEVELOPMENT OF EAST RIVER FRONT, MANHATTAN ISLAND—REGIONAL PLAN OF NEW YORK

FROM A DRAWING IN WATER COLOR BY FRANCIS S. SWALES, ARCHITECT

PENCIL POINTS
(January, 1932)

Pencil Points Series of Color Plates

This plate shows a portion, reproduced in color, of one of eight drawings of studies for the East Side of Manhattan made to illustrate Mr. Swales' ideas of the types of development that might take place consequent upon city planning improvements of land near the river front and inland. The reproduction is at a little larger than half size, the original having been made at a scale of 40 feet to the inch. The portion shown applies to the area between East 35th and 37th Streets. Since these proposals were made to the Regional Plan and exhibited in 1925, fourteen city blocks have been developed in this section of the city for the purposes suggested and on a scale as large as indicated by the project. Although the land along this section of the river was for many years in decline—used for city dumps, building material storage, and slum residences—the typical development has become, since the Regional Plan began its campaign against unhealthy conditions, residential work of high class.



PORTION OF DEVELOPMENT PROJECT, EAST RIVER FRONT, MANHATTAN—REGIONAL PLAN OF NEW YORK

FROM A DRAWING IN WATER COLOR BY FRANCIS S. SWALES, ARCHITECT

PENCIL POINTS
(January, 1932)

Pencil Points Series of Color Plates

This plate, like the other color plate in this issue, shows a portion of one of eight drawings, each ten inches high by five feet long. The part here shown is, therefore, about nine-tenths as large as the original. The drawings were inked in with brown or dilute black ink and were then rendered with water color. In general, the palette used consisted of Light Red, Aureolin Yellow, Viridian, and four hues of blue—Cerulean, Cobalt, Ultramarine, and Smalt. The studies were commissioned by the Regional Plan to obtain suggestions from the architect as to the best and most probable uses that might be made of the land. Such architectural outline studies assisted engineering estimates of probable future traffic and transportation needs and park space required. Owing to the occupancy, in 1924, of this district near 86th Street by Italian residents, an Italian cultural center was proposed. Private school buildings have actually resulted. The dome was conceived as suggesting the Italian quarter by its similarity to that of St. Peter's at Rome.

A TREE STUDY

FROM A PENCIL DRAWING BY EDGAR I. WILLIAMS

PENCIL POINTS FOR JANUARY, 1932
VOLUME XIII NUMBER 1

This drawing was made on cameo paper at about one and a half times the size shown here. It is by drawing trees in this way, direct from nature, that the draftsman can become familiar with their forms so that he will not be at a loss when called upon to show trees and foliage in a rendering.

Misadventures of a Draftsman

6—Caravan to Mecca

By George H. Allen

It was diversely called Margot's; the Sawdust Cellar; plain 18 Christopher Street; or, as I put it, simply—"Mag's."

As you approached the entrance, set three steps below the street level, you noticed fly-punctuated posters in a curtained window and smelled the wholesome and enticing aroma that issued from the doorway. The good food they served belied the meretricious interior, which was somewhat tricky and gaudy. This was my favorite haunt and on this particular day I was sitting at a table in the far corner, having a light lunch and my bottle of *vin rouge*.

It was one of my off days, of which there had been so many lately. I was tired of being the draftsman—tired of working for someone else—tired of having my nose down on the board all day, of being measured at the end of the week in dollars and cents. I wanted to have my own office, be my own boss, free to come and go as I pleased!

In other words, I wanted to set up a practice—but how did one go about doing this? First get the work. Granted, but how does one get it? Advertise? No. The profession says that it's both plebian and vulgar for an architect to tootle his own wares in such a manner.

It was nothing short of chimerical to believe that I could buy myself a nice sign with gilded letters, stick it over the door, and wait inside in dignified seclusion until by the sheer force of my artistic attainment (?) the people would eventually bring me jobs on silver salvers. And yet it was mystifying to me just how one did jump this hurdle.

Only a short time ago I heard, in what I believed to be the strictest confidence, that a big local banker was going to build. So, in very short order, I managed to gain admittance to his office, only to have him tell me, apologetically, that he had selected an out-of-town man for the job. Now this banker was known for being a "home town" booster, and I was at loss to understand his decision. After a long chat with him, it finally came out that his decision to build had leaked out generally and that he, from that time on, had become a marked man. He was actually in distress because there were so many architects.

Why, his houseman had to sweep them off the front and back stoops before he could get out in the morning. They dogged him at every corner; every person or friend or business associate who came to see him was the emissary of some architect or other. They were pests, so, to settle things the easiest way, he chose a man from another city.

Of course, I had heard of the fellow that talks himself into work, but you have to be naturally clever, and have the gift of gab. One instance that I know of concerned a chap who was a capable draftsman, one of the elite, a real master, that I had known for a long time. He managed to get a few nice little jobs to start with and worked the society end—strong. He was born to it, and had friends in it. It came perfectly natural to him; he was a well-bred, suave, and handsome cuss at that.

On the train, one day, I met a very dear old lady from his town, one of the leaders there—wealthy, sophisticated, and important. She was going to build a large home and we got to talking about architects. Did I know so-and-so, and was he very good? Oh, yes, of course. And she wanted me to tell her all, and naïvely asked me if he was fifty years ahead of his contemporaries?

"Yes, positively," I assured her, "yea, sixty years ahead!" And she was so pleased to get that from another architect, because so-and-so had told her that very same thing so often! And, what's more—he got the job!

In the midst of these thoughts, I was savagely attacking a lamb chop, when I heard my name called.

Looking up I saw it was Jim Hammell, an old friend of mine who was a contractor and for whom I had done work at different times in the past.

"Hello, Jim," I grumbled. "Sit down."

"I certainly will, Dozy, and it looks like I'm just in time."

He pulled out a chair and made himself comfortable. After a few minutes hesitation, he ordered up a goodly dinner from the menu. He might just as easily have given them the menu and told them to bring in all they had in the kitchen!

"What's happened, Jim? You must have run into lady luck recently," I said dryly. "I know she's not flirting around me."

"Dozy," he said, laying his hand gently on my arm, "I believe she will soon."

I looked up inquiringly.

"And you're just the man I've been looking for."

"Looking for me?" I queried.

"Yes, you." Talking in a soft but firm voice, he went into detail about his "windfall," until I felt my skin prickle in anticipation of what practically was a sure thing. To design a beautiful mansion, the kind you dream about, you know, with a bathroom whose ceiling is a solid mirror and whose bath faucets are turned on by pressing crystal butterfly wings! At least these were some of the things this party he was speaking about wanted, and the next thing for me to do was to go up and sign on the dotted line.

In the flush of dawning opportunity, everything began to look brighter, and the incidents happening thereafter were of such an unusual character that I have set them down in the following tale.

* * * * *

We were watching the moving landscape of Westchester County from the windows of the train and discussing the possibilities and outcome of our trip. The conversation gradually diminished as the time wore on, because we both, I imagine, wanted to be alone with our thoughts.

Towards noon the train pulled in at the station where we alighted on the platform and immediately hailed a taxi to take us to the place. The town, which at first glance appeared to be a large one, was in reality a modernized suburb. The usual array of gift shops, tea rooms, and beauty parlors lined the sidewalks. Nearly every corner had a real estate office displaying pictures of choice homes that were to be had on "small carrying charges."

The further we traveled in the taxi, the rougher the

TWO PENCIL SKETCHES BY E. P. CHRYSTIE OF NEW YORK—ST. THOMAS' CHURCH AND FIFTH AVENUE IN THE THIRTIES

way became. We were driving on a road bordered by large estates. The only evidences of them, however, were the ten-foot-high boxwood hedges that lined the road and the ornate entrance gates, flanked by stone piers, over each of which hung a wrought iron lantern. Suddenly we turned into one that looked just like the others except for the iron gate, which had been recently given a coat of red lead, probably indicating that it had but lately come from the factory. I was idly wondering about this while we were winding up the drive. Shortly we came to the house and alighted at the door.

The butler answered our ring and my jaw dropped in amazement when I saw him. Except for the clothes that belied his appearance, he might have been a thug from the lower East Side—a flattened nose, cauliflower ears, and direly in need of a shave. He glowered at us. He had a foreign accent and I was almost positive he was a Sicilian. We inquired for Mrs. Stuyvesant and he informed us, in a surly manner, that we would find her in the garden in the rear. Walking around the house we found her having tea with a younger lady, who, we discovered through an introduction, was her daughter. After the preliminaries were over Hammell wasted no time on broaching the subject of our visit.

"Mrs. Stuyvesant, I've brought Mr. Reynolds along with me. He has had quite a bit of experience in designing houses and I think he might be of some help to your son-in-law."

She looked over at me and said, "Would you please come a little closer Mr. Reynolds, I'm so badly nearsighted—there that's better. You are an architect, then?"

I replied in the affirmative.

"Oh yes, well I have decided to build a large home, or perhaps I should say manor house—isn't that what you call it? Mr. Hammell, here, is a good friend of mine and I am having him build it for me, which you possibly already know, but he has tried to persuade me many times before to take on an architect. You see my daughter has recently married a count from Italy," she said, smiling over at her. "He is so artistic and clever, and he told me that he can design just the thing I want, even though he isn't an architect, and I am positive he can do it."

"Just look at this," she said, going through some drawings lying on the table and finally pulling out one of them. "This is a picture he drew for me—isn't it lovely?"

She handed me an elaborately mounted elevation of a large residence that smacked of those antiquated pillared affairs the soap kings in the eighties used to build up on the Hudson. I looked closer—sure enough. I placed it immediately—a photostatic copy of the Tuscan order from an old architectural book I remembered from my school days!

Slowly I handed it back to her. "Did he design this?" I asked.

"Oh yes indeed," she said and her daughter looked at me sharply. Meanwhile, strange thoughts were racing through my head. First the gate, then the butler, and now this fake drawing.

"Mrs. Stuyvesant," spoke up Jim, "your son-in-law, I admit, is very well qualified in knowing and designing just what you want, and you also told me about the antique wrought iron and marbles he is importing for you from Italy, which is splendid. But I think we should have an experienced architect also, because, as you know, the mill man refused to bid on the drawings he submitted for the interiors and millwork, and there will be hell to pay when we come to the working drawings. Mr. Reynolds here, or anyone, for that matter, should be called in to help him with details of that nature."

She seemed bewildered, and nervously toyed with her lorgnette but finally, turning to her daughter, asked:

"What do you think, Gloria? I am inclined to think Mr. Hammell is really right."

"Mother, you know Paul can handle everything perfectly, and I don't see why you should want to antagonize him by bringing anyone in to help him. He said that he can do the work better when he is alone."

I looked at the daughter. She didn't want us, all right. I could see that. Her deep-set black eyes flashed at me—I might have been mistaken, but I thought I detected an underlying motive for her not wanting us.

"Well, let's wait until Paul comes, he'll be here any minute now," Mrs. Stuyvesant said, smiling again. "Come, I will show you the imported marbles that have just arrived in the past week."

Her daughter remonstrated, but she finally took us around the side of the house and we came on an aimlessly assembled pile of vases, garden benches, and statuettes.

"There," she said, beaming, "they cost me twenty thousand dollars, but it's all rare marble, and all antique."

"Say, they're fine, all right," said Jim, expansively.

I went over and casually rubbed a vase, and to my astonishment it wasn't marble at all, but simply terra cotta of the cheapest sort. And all the rest was either terra cotta or cast stone and the whole lot couldn't have cost over a couple hundred of dollars.

"Here, what's all this?" said a curt voice behind us.

I turned around—it was the Count. He stood there, glaring, and two evil-looking bodyguards on each side of him stepped forward.

"Will the gentlemen please come away?" he said.

Mrs. Stuyvesant was explaining to him as we left, and I heard him say,

"I tell you Mother . . . . these beautiful marbles . . . . they are not for anyone to see yet . . . . "

We were quickly dispatched to the gate by the two "guards" and with three ferocious dogs snapping at our heels it clanged shut noisily behind us. We started to walk away, when I went back and examined it closely. In the corner was stamped—"Excelsior Iron Works, Albany."

"What're you looking at, Dozy?" asked Jim.

"Oh, nothing, just admiring the imported gate," I said gloomily, walking away.

"Yeh—it's a knockout," he said lighting a fresh cigar, "beautiful stuff the Count's collecting all right. It's too bad we couldn't get in here—I figured it was a sure thing and I'm sorry, old man."

"Oh, forget it," I replied.

Poor Jim.

* * * * *

The dying sun in the west was enveloping the distant hills in a purple haze, and the clouds scurrying across the sky were tinged with gold and scarlet, as if under the ægis of Zeus whipping his steeds heavenward.

The steady clack-clack of the rails pierced my senses dully, my mind was wandering in retrospect. A lovely old lady . . . . a crooked son-in-law and daughter . . . . both scheming to swindle her out of her money . . . . vicious-looking servants . . . . fake drawings and "antiques" . . . . it all seemed so unreal that I pinched myself.

Poor Jim . . . .

TWO PENCIL SKETCHES OF PARIS BY ARTHUR WARE

THESE SKETCHES WERE MADE LAST JUNE ON THE EXPEDITION OF THE BEAUX ARTS SOCIETY TO THE ÉCOLE DES BEAUX ARTS

Popularizing the Profession with the Public and with Itself

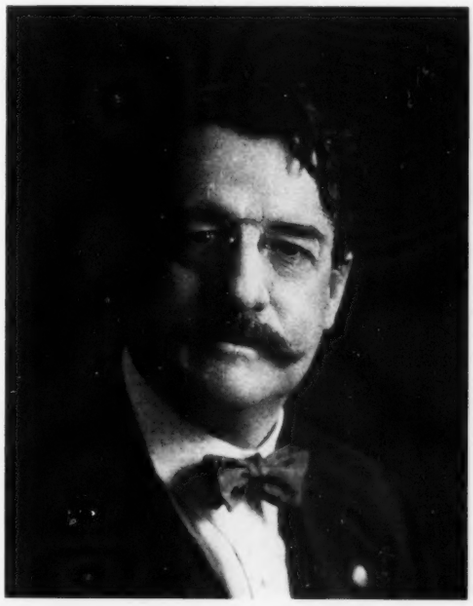
By D. Knickerbacker Boyd

Editor's Note:—*The following text constitutes the major portion of an address delivered a number of months ago before the Detroit Chapter, A.I.A. So much enthusiasm was expressed by the audience at the ideas set forth by Mr. Boyd that we felt his message might well be of great interest to the wider audience represented by our readers. Here it is, then, with such slight modifications as were desirable to make it general rather than local in its application. We hope it will be helpful to many local architectural organizations and, through them, to the entire profession.*

I happen to be a member of the Institute's Committee on Public Information. From time to time we are corresponding with the Chapters, and the men of the profession throughout the country, and here and there there originates a demand that we must advertise, and that we must tell the public what constitutes good architecture and what an architect is. There are not a few exponents of that idea. Many of you who were at the Convention of the Institute in Washington two years ago will remember the whole evening which was given to a discussion of that general subject. Some were in favor of paid advertising to tell the public who we are and what we do. There were others in the majority who favored increased service as the means of recognition.

Relationship of Our Profession to Business

We of the Committee on Public Information feel that architects, by and large, do not realize the possibilities of their relationship to the public through leadership in the building industry and all which that implies. It is our theory that the profession of architecture is changing so that it is not today solely a profession but that it is a combination of a profession and a business, and that we must realize that we are in that new sort of a set-up and can not sit complacently by and work in our secluded offices over drawing boards only and let the rest of the world go by. We are a part of a great industry which actually represents the growth of the community, not only in the designing, planning, and construction of buildings, but in their proper placing, spacing, and height, so that they will fit into the right plan and development of the city and not congest traffic or crowd out open spaces—in other words, our fullest work should contribute to all of those things which go to make for the successful economic life of a community. So, it does seem to some of us that if we, as architects, will get into the affairs of life and take our parts in the community and do everything that we can that will—if you choose to so call it—exploit the profession of architecture, we don't need to advertise to the public because they will know us by our acts. And the public likes action; so do the newspapers.



D. Knickerbacker Boyd

Architects in Service to the Community

Nor can we act alone because, as I say, whether we like it or not, we really must assume the position of at least *coordinators* of the building industry if we do not like to feel, or others do not like to feel, that we have the position of *leadership* in the building industry.

Now, let us see what we can do! And again I want to repeat that these are not in any sense critical remarks, but just as I see it, the presentation of some opportunities for service. In the Constitution and By-Laws of the Institute, a paragraph says that the objects and aims of the Institute shall be to promote the cause of architecture and other things related to it, but that statement terminates with the words "and to be of ever-increasing service to society." So, we will assume that the matters of design are well taken care of, also planning and construction, and we will talk about the services of architects to the communities of which they are a part.

Local Recognition of Individual Architects

If you pick up a newspaper and read that some important event is going to happen in your city, some distinguished visitor coming here, and that a committee of citizens is being appointed by the Mayor to arrange for that occasion or to meet and entertain that distinguished person, it may be that a hundred committeemen are appointed, but you will usually look in vain for the name of one architect. As a rule you will find a number of lawyers and ministers and physicians and a great many business men and sometimes an engineer or other technically trained person, but seldom an architect. So, it seems to me that if we wish to be considered of any consequence in society we must first put ourselves into the life of the community. Our position will then be recognized and we will be tied up with all the others who are regarded as the prominent citizens and the builders of communities. As I feel that we ought to look about for these opportunities of being of increasing service to society, see what they consist of and take advantage of them, I want to lay a few of these thoughts before you, and see if I am right.

THESE SKETCHES WERE MADE LAST JUNE ON THE EXPEDITION OF THE BEAUX ARTS SOCIETY TO THE ÉCOLE DES BEAUX ARTS

Collaborate with Officials and Civic Organizations

First, we should collaborate with the Mayor and City Council or Cabinet or whatever the local form of government may be, and also with the state and national government, in any affairs that have any bearing on the calling that we profess. That would commit us to render service in connection with the building codes of communities or the states; with zoning acts; with city planning, and regulation of traffic as controlled by buildings; with the selection of sites, parks, playgrounds and all of those things in which we are qualified to serve. We would then, it seems to me, have the Mayor and Council and other officials conferring with the representatives of our profession of architecture all or most of the time on matters in which our opinions should carry weight. Then, the next thing, it seems to me, is that we should seek our opportunities to cooperate with all civic organizations. Let us take first the Board of Commerce. I have been talking with Mr. Harrington and he tells me that the Board in Detroit gets marvelous cooperation from architects. Well, I am delighted to hear that. That is more than it asks or receives in Philadelphia, and some other cities of which we know. But, let us think of some of the things which our profession can generally do in collaboration with various Chambers or Boards of Commerce and see if they are worth while.

Regional Maps and Locations of Buildings

Consider the stranger within your gates, or a man like myself who comes into any town with the complicated plan like you have here and wants to find his way about. Why not have a large map of the City of Detroit prepared by the Detroit Chapter of the American Institute of Architects, in collaboration with the Board of Commerce, showing, at a large scale, the layout of the city and its environs and marked particularly with the important buildings. Have that map, as decorative and informative as possible, duplicated and displayed in all of your railroad stations, trolley terminals, bus terminals, hotel lobbies, and other similar places. On such a map could appear the statement that it is prepared in collaboration with the Board of Commerce, as you call it here, by the Detroit Chapter of the A.I.A.

Chamber of Commerce Publications

The Board of Commerce of this progressive city, undoubtedly prepares booklets for distribution all over the country exploiting the advantages of the city, as other Boards do of other cities. Seldom are such pamphlets ever prepared in collaboration with architects, yet a large part of the contents are illustrations and sometimes descriptions of buildings of which the names of the architects are almost never given. Why shouldn't all architects collaborate with all Boards of Commerce in the preparation of all such booklets.

Give Names of Architects and Builders

And, from time to time, small folders are issued for distribution to bodies which may hold Conventions in our competing cities. They, too, are illustrated with buildings, those in Detroit designed by many of you men here in this room—and yet your name never appears nor that of any good builder. So far as the public is concerned, there was no need of an architect for these attractive buildings. Furthermore the name of the architect should, wherever possible, appear on the buildings themselves. This will give credit where credit is due. If the buildings are not attractive, let us get the name of the guilty fellows anyway and judge them accordingly. I would also like, as frequently as can be, to see the name of the builder accompany the name of the architect.

Preserve Historic Buildings and Objects of Interest

In your city, as in others, there are always bound to be objects of interest to the visitor as well as to yourselves, such as buildings, structures and monuments, whether of architectural or historical interest, that should be better known and in many cases preserved. Some of them may have to disappear. Why not work with your Board of Commerce and with other groups of interested citizens in locating all of those buildings and preserving them and in photographing and keeping records of them in whatever place you might have to permanently place such records? We have underway in Philadelphia a very ambitious program to survey, draw, photograph or record all the worthwhile buildings of former days and a Historical Society which collaborates with us in preserving the records. A philanthropic citizen has provided the preliminary funds and many otherwise unemployed draftsmen are now engaged in the survey and other work, under the voluntary direction of competent architects, as a Chapter activity.

Boards of Education and Exhibits in Schools

Then as another service opportunity we have the matter of cooperating with the various other Departments in each of our cities—as well as civic associations and organizations. I would like to see the closest possible cooperation between the Boards of Public Education and the architectural profession. Now, in Philadelphia, where we have annual architectural exhibitions, we also prepare special exhibitions of architecture—and again you will understand that I am not holding Philadelphia up, it is just to exemplify the idea—and our Board of Education appoints a committee on selection to collaborate with a committee of the Chapter which selects drawings and other works of architects which will be particularly appropriate to show to pupils in the schools of Philadelphia. The Board of Education collects these and takes them around on a tour of the schools and from time to time members of the Chapter go to these schools and give talks on architecture in the places where these drawings are exhibited. That activity is appreciated and has been very highly commended. The Institute's Committee on Public Information and Mr. Grady, the publicist of the Institute, have sent out a national release on that, and have suggested that other Chapters might do the same sort of thing to the advantage of the profession and the pupils in each locality.

Craft Groups, Service Clubs, Women's Organizations

We also have in this same field, which I am attempting to cover, other groups of men—organizations of Engineers, the Builders Exchanges, the Real Estate Boards, the Financial Interests, Building and Loan Associations, Building Owners and Managers and others, all of which play a very important part in the selection of sites, in the financing and construction of buildings as well as their occupancy and successful operation. Without the owner and the

financier we would not be practicing architecture. We also should take into consideration cooperating with the Service Clubs like Rotary, Kiwanis, Lions, Optimists, Exchange Clubs, and others. In most of these, we could make a much greater impression than we do as architects. Through these and others connected with the Building Industry like the City Planning and Zoning Commissions, also the Civic Clubs and the active Women's Organizations which we have in all of our large communities, we could, by meeting with them and rendering service side by side, impress upon them the manifold duties, interests and possibilities for civic good of the architectural profession.

Participation in Better Homes Movement

Then, there is another group of men, known in Philadelphia as "operative" builders. Some of the same men in other fields are called "speculative" builders. I am not now referring to the other group known as "jerry" builders, but the legitimate operative builder who in his own way erects buildings by the mile almost unmolested and unadvised. Now, why shouldn't we cooperate with the operative builder and with Better Homes in America at Washington, of which Dr. James Ford is Chairman, and collaborate with him and his Committee and the Women's Organizations during "Better Homes Week"—which I imagine you observe in Detroit as we do in other cities, as well as all through each year—and see what we can do to better the type of everyday homes—the garden variety which are so sadly devoid of architectural influence except for the Architects' Small House Service Bureau, affiliated with the Institute.

Advisory Councils to Bureaus of Building Inspection

In Washington, where Horace Peasley has been so well referred to, they have an Architects' Advisory Council which eight years ago started the idea of reviewing the blue prints before permits are issued by the Building Inspection Department which collaborates in this fine enterprise. There was an article in an issue of *The Octagon* explaining what the Washington Chapter (and also, in a similar way, the Cincinnati Chapter) is doing to catch these drawings in the early stages and to commend them or offer suggestions for their improvement, especially of those low cost homes, the common housing proposition, and have them corrected if possible before they are perpetrated—I say that advisedly instead of erected. It has been found that those builders who are contributing to the progress of the community and are risking their money by projecting these buildings, often well in advance of their need, to say nothing of their occupancy, welcome this opportunity to have their buildings capably scrutinized. I am told by Mr. Peasley that the suggestions offered not only frequently simplify the building but actually cost the builder less when he eliminates various imitation roofs, galvanized whatnots or other geegaws which he gets rid of by reason of following this professional advice and service rendered by the Chapter through the Building Department of the District of Columbia.

Post Cards and Credit to Designers

We also have a great opportunity, if we do many of these things, to cooperate with the publishers of newspapers, periodicals, books, and those who issue the colored postal cards which you can buy all over Detroit, or any other city or town. All your fine buildings are shown but you are never mentioned as the architect. Why should these illustrations and postals show the buildings, the monuments or memorials, without making known who is the designer? Such is seldom the case with a piece of sculpture or a picture. Imagine a book being issued without the name of the author or an opera given without naming the composer!

Names of Architects in Newspapers

We, in Philadelphia, as I said to some of the Chapter members here yesterday, have personal contact with the men who are known as the real estate or building editors of the newspapers. We get them together for luncheon or dinner once in a while and through human contact and a more mutual understanding convince them of the fact that it is a shame to show pictures of buildings in the daily or Sunday editions especially in the rotagravure sections, where so frequently appears an illustration where all they have to say about it is that it is the "architect's sketch" or a "perspective drawing" of the proposed hospital, or whatever it may be, and never mention the name of the architect. The ordinary reporters who can be influenced by these special newspaper men will, in writing about the cornerstone laying of a church, for instance, usually mention the names of the pastor, the choir leader, the building committee and everything connected with the ceremony except the name of the architect, whose design is shown. Now, if we press home all these matters and are constantly in the affairs of the community we will not be passed by in that way.

Literature on Places of Interest for Visitors

Whether or not you have in Detroit historic spots which can be offered for visitors to see, there are certainly places which are recognized by the Board of Commerce and sight-seeing concerns as the things which visitors should not miss. I don't see why the architects, the members of the Detroit Chapter, in particular, and the members of the Thumb Tack Club, too, should not collaborate in getting out some sort of literature to acquaint the visitor with the places he ought to see. You will find, I believe, that you could get the cooperation of the local utilities, including the traction companies and the bus lines, in the preparation of some sort of folder, adequately and equitably illustrating and describing the points of interest to visitors, and giving the routes how to get there. Some few years ago, in our city, it was proposed to the Philadelphia Rapid Transit Company that the architects of Philadelphia, through the Chapter, should prepare a list of the ancient historic monuments of that section, such as Independence Hall, Christ Church, St. Peter's Church, Stenton, Bartrams' Mansion and Gardens, the Old Carpenters' Hall and other buildings which are familiar to many of you here and throughout the country and so many of which are notable samples of architecture. The Transit Company said that it would welcome this information in which would be included the name of the architect and, in not more than a few lines, some salient features of the design, construction, and the historical significance. The Company stated that it would work out the routes and other data and would print 1,000,000 copies, giving credit to the Philadelphia Chapter of the A.I.A. and distribute them to the public through the trolley car conductors. Believe it or not, the Chapter turned down the proposition made by its Committee on Public Information, because the then Executive Committee said it would bring too much notoriety to the architectural profession. That, of course, was a few years ago. When the matter was brought up again

later it was discovered that the Rapid Transit Company had gone ahead and done it themselves anyway but did not mention anything about architectural features of interest to visitors. Nothing was said about the architect, and nothing was said about the Philadelphia Chapter, so we were not inflicted with that notoriety. (*Laughter.*)

Furnish Data to "Rubberneck" Announcers

Sometime ago, I was in New Orleans at the time of a Convention of the Common Brick Industry and was also the guest of the then Louisiana Chapter of the Institute. It occurred to me as a member of the Institute's Committee on Public Information that here was an opportunity for the trial of a new kind of service. So I arranged to get from the New Orleans Chapter a list of a few prominent, well-designed buildings which were constructed of brick. The local Brick Association arranged with the bus companies and the sight-seeing "rubberneck wagons," that if the drivers and announcers were each furnished with a description of these buildings they would take their sight-seeing visitors that week to these buildings and would read this citation as prepared by the Louisiana Chapter. The Chapter promptly got up the data except in two cases where they couldn't themselves ascertain who were the architects of those old buildings, but they did mention the salient features in which it was supposed a visitor would be interested regarding the characteristics of the design of those old buildings. And, of course, the Brick Manufacturers got behind the movement, and for a week in New Orleans every sight-seer was informed as to the salient architectural features of those buildings and the names of the architects. Now, why couldn't we architects bring that about as a regular practice? Not only with the sight-seeing busses but the ordinary autos which you see standing around in most cities including Detroit which can be hired by the hour, or for the afternoon or the day. Why couldn't the Detroit Chapter get up for those men a card, a list, or a little booklet with the information about the buildings, very brief, and with the name of the architect—Smith, Hinchman and Grylls, Albert Kahn, and all of you—each of you might just as well have his name mentioned in connection with any good building. I am sure that with the proper kind of cooperation and the right spirit of service, the Companies would do this. Something would then be received for a service which could not be secured for pay. I don't believe you could pay any of them to do it.

Booklets on Buildings for Quick Reference

Now, the newspapers in Philadelphia have told us that if there were such booklets available they would keep them in their files and could refer to them constantly. This would keep them posted and help them to complete their news in the case of fires and explosions or accidents or anything of that kind. They want such information available in regard to the buildings in each city, and I imagine that they would welcome it just as much in Detroit as they would in Philadelphia.

Biographies of Architects for News Releases

They also would like to have the complete biographies of the principal architects in each locality, with a list of buildings designed by them, honors conferred, etc., etc. Most of the newspapers maintain what they call a Morgue, and you will find, if any of you here do not know about newspaper procedure, that many of you are already written up, perhaps all too inadequately, and on file in the offices or libraries of your newspapers. Not all of you are—but those who should be, ought to be included, and your records should be checked up from time to time with the records in the newspapers so that if you are run over by a taxicab and hurt or otherwise made the subject of immediate news, they will be able promptly to give some reasonably correct and adequate description of you and your accomplishments. In an emergency they want this information quickly. We have a Committee on Biography and History in the Philadelphia Chapter and not long ago one of our prominent members died. While we all too often have that thing happen, this was on a Saturday afternoon in the middle of summer. I went to the office and got out all the information which I had on file about him and got the Chairman of the Committee on Biography on the phone and got more information from him and took it home to work up ready to have it typed first thing Monday morning so as to give them more detailed information than I thought they would have for their first notice. On Sunday, however, I read a column description in each one of our papers about this very man. I didn't have to send our data in. As a matter of fact it was not as full as what appeared in the newspapers. Now, that does not mean that we will all be equally well described, and in this case there were some errors, but it shows that the newspapers were "on the job."

Honor Awards to Owners of Buildings

Referring again to service, you have been doing a wonderful piece of work in attracting public attention while honoring the owners of buildings and yourselves as architects by making Honor Awards for the best recent architecture. Mr. Gamber very kindly gave me a copy of your publication on this subject which shows that you had prominent architects here from other communities so that you would not have to judge your own work. I know that you got much publicity including illustrations in the Sunday Rotogravure Sections of the newspapers on that occasion, but I am wondering if you have been thinking of holding some kind of an exhibition in which you can show drawings and photographs of the buildings that got these awards, together with other displays. We have found that the holding of an architectural exhibition is a great stimulus to public interest, especially in some of the smaller communities.

Hold Exhibits in Conspicuous Places

When you do hold an architectural exhibition, I suggest that, instead of holding it in the Art Museum or some similar institution, you consider some outstanding "downtown" location where the greatest attendance will be assured. We have found it—and so have others who have tried it—very desirable to hold architectural exhibitions in department stores, or some conspicuous place where the people assemble anyway and do not have to be especially attracted to it as they would be in an institution to which they normally go in very small numbers. See to it that the exhibition is available to them when they are going to some other building for some other purpose.

Traveling Exhibits of Architecture

Two years ago, the Philadelphia Chapter held its architectural exhibit in the Wanamaker Store. We kept, as nearly as we could, an accurate count of the visitors and found that 15,000 people actually attended that exhibition. From that collection, a traveling exhibition was arranged

for under the auspices of the American Federation of Arts. We sent out, on a tour of the country, 112 examples of architecture, including all ranges of buildings, so that the exhibition would have a popular and general appeal. Each showing was held under the auspices of some other Chapter of the Institute or some local organization. I went to see the first exhibition and found that it was not properly balanced. It did not have enough residential work in it nor enough color. We promptly supplied that deficiency for the second exhibit, and after about a year of traveling over about 14,000 miles of distance through arrangements made with the American Federation of Arts by two members of the Southern Pennsylvania Chapter of the Institute, the Exhibition was taken to Altoona. The Gable Department Store and those men in that section made this exhibition the vehicle for the most live wire kind of propaganda in arousing interest on the part of the public that I have ever witnessed. They arranged with the Rotary Club, Exchange, and the Lions Club and thousands of pupils through the local and nearby Boards of Public Education all to listen to architects and other speakers the first week who told them all about this exhibition and brought home the importance of architecture to the community. Some of these speakers covered the subjects of City Planning and the advantages of Eliminating Slums and ugly parts of the town and of modernization to replace them with playgrounds and open spaces and new buildings of the right kind. Others pointed out the necessity of repairing and properly maintaining old buildings which were otherwise good.

Make the Public Conscious of Architecture

Altoona was a community more or less relying upon builders to furnish the people with drawings, especially for buildings of the residential character. This intensive campaign, with the Exhibition as a back-log, made a complete revolution in the thoughts of the people regarding what an architect did, and what architectural services meant, as well as the responsibility of the architect to the community in more than mere matters of design. The local architects referred to arranged with the moving picture theatres to run every day, for the entire three weeks in which the exhibit was there, what they called "trailers" calling attention of the people in the moving picture houses to the fact that there was an architectural exhibition, sponsored by the American Institute of Architects and the American Federation of Arts, being held in this department store. Altoona was not the headquarters of the local chapter so they played up the American Institute of Architects itself. They had the cooperation of the Chamber of Commerce and all civic organizations and arranged for radio addresses; they had speakers come in from other Chapters and from colleges and universities. State College sent a professor of architecture down to talk to them, and in this and many other ways we caused the whole community to become architecturally-conscious in three weeks. I don't know how well it has lasted, but I do know that the man who was chiefly back of the proposition secured a great deal of work. There are only three firms up there, and he said that the other firms were also increasing the amount of work which they were doing over what they had ever done before.

Radio Tributes to Architects and Building

Further, along the line of popularizing the profession with the public, we can have great cooperation from the manufacturers of building materials. I have left them out of my previous reference to builders, engineers, realtors and others, because they have a separate organization and can function with us as Chapters of the Institute through the Producers' Council, which is a group of manufacturers affiliated with the American Institute of Architects. Some of the members of that Council as, for instance, the Westinghouse Company and the American Rolling Mills Company have had national hookups on the radio for broadcasting the story of the architectural profession. Now, if they can do it, why shouldn't others do it? And why shouldn't some of the local organizations do the same thing with the local Chapters? Not so long ago, the Philadelphia Chamber of Commerce asked the Philadelphia Chapter of the American Institute of Architects to provide a speaker for a weekly broadcasting feature which the Philadelphia Chamber of Commerce was sponsoring. We sent Walter H. Thomas, a former President of our Chapter, who is now the director of the Department of City Architecture, to give a talk on the American Institute of Architects. For this occasion, he had to fabricate out of his own head—with the assistance of some of the literature of the Institute—a talk which included, of course, some reference to activities of a local application. This took just fifteen minutes on the air. Since then, I have suggested to the Public Information Committee of the A.I.A that it issue a prepared statement for occasions like this, which can be distributed in advance to all Chapters. With this in hand each Chapter could encourage the local Chamber of Commerce or Board to arrange for a broadcast locally, with paragraphs added about the local activities of the Chapter in that particular territory. You will probably, in due course, hear from the Institute's Committee on Public Information as the fulfilment of this suggestion.

Make Use of Slogans

Some of the manufacturers of building materials are doing fine work in the direction of popularizing our profession and the building industry of which we are all parts. We are trying now to make an arrangement, which was favorably acted upon at a meeting of the Board of the Institute, right here in your own city. The Board approved the idea of the manufacturers of building materials, in their national and local advertising, making reference to the desirability of employing an architect. That has to be done very carefully because these men, no matter how much confidence they may have in the architects they know, cannot merely make the broad assertion that anyone will be benefited by employing an architect, because in some instances it might not be so. We have got to put ourselves on our mettle and not only uphold the dignity of the profession, but justify the rightful position of the competent architect, so that these advertisers can say that the building public should consult perhaps not any member of the Institute but so that they can advocate the employment of any properly qualified architect. Now, the architects in almost any community can collaborate with the local producers of building materials preferably, of course, through the Producers' Council.

Cooperate with Producers' Council

In Philadelphia, we met with the various district representatives and got them to organize themselves into a local club—they do not call it by any other name. In Chicago they have such a club, and the biggest meeting of architects, as I understand it, ever held there was when the Producers' Club of Chicago and the Architects held a

joint meeting about two years ago. We all can certainly learn something from the men who manufacture materials, and in this day of competition when industries are—for the most part—telling the truth about their own products, we ought to have the fullest contact we can have with these men. As they produce the materials which we use in order to accomplish the actual construction of the buildings which we design, we have a common goal in popularizing the profession with the public.

Recognize Craftsmanship

Now, referring again to popularizing the profession with itself, if we were merely designers on paper with pencil, or on cloth with ink, we would not be architects. We have to have good materials. And they have to be or should be properly applied by skilled workers. I do not want, therefore, to conclude my remarks without some reference to what we ought to do in encouraging craftsmanship on the part of the men who actually do the work with their hands in assembling the materials for the buildings which we design. The Institute is promoting, through the Committee on Industrial Relations, the idea of the Chapters awarding certificates of craftsmanship, in the various communities where there are not Building Congresses, to the men who have attempted, during the erection of a particular building or during a year's hard work, to do the best damn job they can with their hands and their heads—men who show interest in their craft and have pride in the result of their work. And, believe it or not, as Ripley would say, we certainly can do our part in encouraging the best work on the part of all by letting the men who do good work know that we recognize it when we see it.

Encourage Good Workmanship in Person

I have often wondered what kind of evenings I would have at home after I had endured each hard day's work laying brick or pouring concrete, or doing whatever might be my share in the erection of a building designed by an architect, if I never heard any kind words nor received any evidence of appreciation when I had tried to do my best. In the first place, the man does not, as a rule, know if he is building a pilaster, how high it is going to be or how it is going to finish, or what is going to happen to it. He doesn't know, if he is building a wall, whether there is going to be a window above, or if it is going to carry a lot of weight. If these men could get, in addition to the orders from the foreman, some ideas direct from the architects we would not only have better workmanship but better interpretation of the design which we had in mind when we studied and worked out the building. Working at that kind of a job, day after day and month after month, if it is nothing but eight hours' grind, and no words of encouragement from the man that designed it, I think it is a very great wonder that we have as good workmanship as we do on the part of American Building Craftsmen. We get it in spite of everything. Think how much better it would be if, instead of hearing words of condemnation, which we may leave with the foreman, the careful worker could go home with knowledge of having received words of praise and say to the wife and kiddies—"By golly, the architect not only spoke to me, but said I was doing a good job." And, if that sort of spirit can be followed at the end of the year or the end of the job, by a certificate awarded on the basis of somebody having observed his good work and knowing that it was meritorious enough to receive recognition, it would permit the right kind of a man to have something which he could have framed and take home and put on the wall and give the whole family something to point to and say, "Look at this and see what the old man did." (*Applause.*)

Office and Job Contacts for Draftsmen

Now, in our own profession, to make it of more interest to our associates and to popularize it with ourselves, we should in our minds revert back to the time of our predecessors and have more intimate contact with the draftsmen in the office, the boys who work over the boards. How many of these young men, after their college training and their probational period in an office—including the difficult but necessary problems of properly drawing window boxes and other details as has been said here—have ever been sent out on the job to see how the things are fitted together that they have been working on in the office. The boys in the offices today are too much stall-fed. They ought to be turned out in the pastures once in a while. They will find out at the site that some of the things they spent so much time on are not followed anyway and in some cases could not and should not have been. In other cases what difference did it make if it was too fussy in the first place. If it is a projecting mold, or string-course or something of that kind, and the draftsmen are thinking only of the profile and haven't got enough set-back in the wall to hold it there, they ought to find out about these things because, while the cut-stone contractor is the man who has to put it there and make it stay up, they ought to help him in advance by knowing these things. They should have some idea, too, of how the projection or the profile is run or cut or moulded, whether the material be stone, or plaster, or wood, or what not. Now, it seems to me, that the boys, if we can't tell them, ought to be able to learn these things themselves. We ought to see that they get out on the job more and into quarries, mills, and shops and let them see how bricks and cement and basic products are made as well as how things are assembled in the buildings.

Educational Contacts for Students and Workers

In that we can have a lot of cooperation from the manufacturers and craftsmen. The architectural schools could consider some things like that in connection with the training of the boys in colleges. The same idea could be, and is, applied in some of our public schools. I was visiting a college, one time, in Texas and greatly honored by being requested to speak to the boys in the Architectural Department there. On the way to the school I noticed a large building being built as an addition to the institution. It was about 300 yards away from the School of Architecture and had progressed to the point of putting on the roof. So when I gave them a talk I said I supposed that they had learned a great deal through this building right across the greensward of the college on their weekly visits to see how it was coming along. The professor nudged me and said that nobody had ever thought to go over there and learn anything about the construction which had been going on for months. Not only that but I suggested to them that arrangements might have been made with the contractor, sub-contractors and material men on that job to have had their men attend appropriate lectures at the school of architecture in exchange for conducting the architectural students on regular tours through the building. Now, doesn't that show that some of us are not thinking or talking in the terms of the boy or man who is learning to

be an architect—to say nothing of the apprentices or journeymen who are working on our buildings?

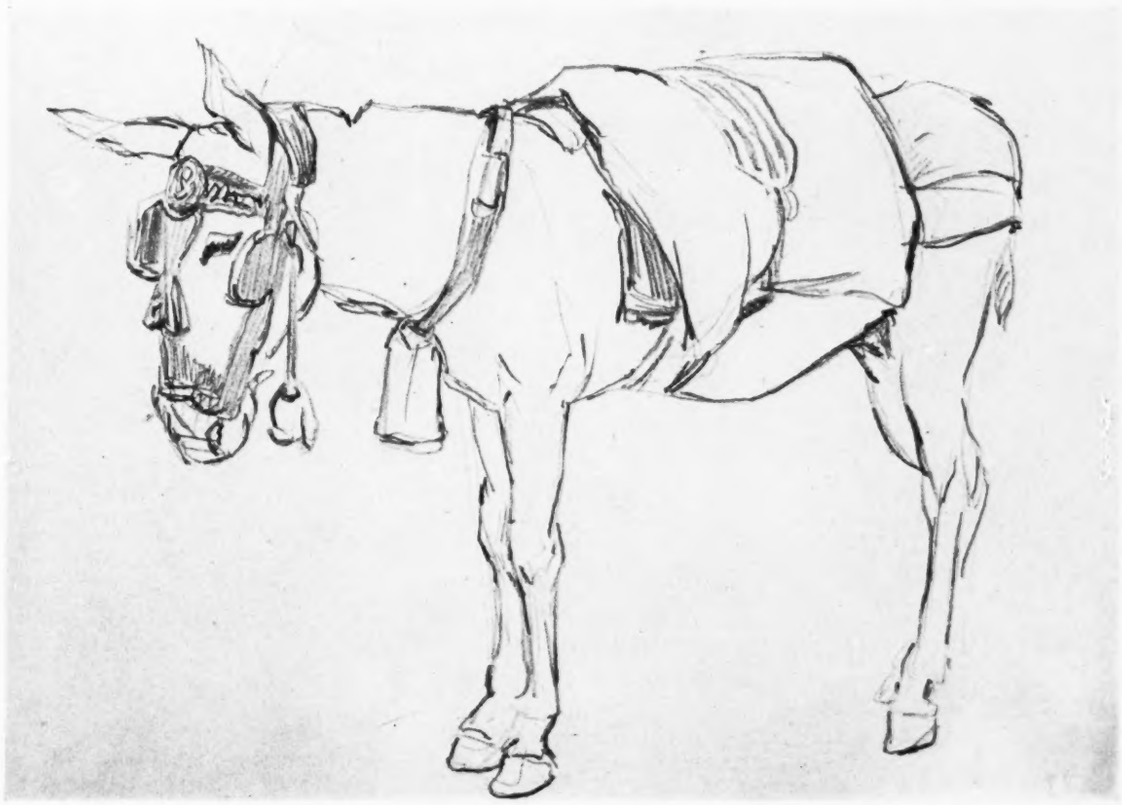
Short Architectural Courses for Manufacturers' Salesmen

I think we not only need closer cooperation with our own men in our own offices, but there is another group that often comes around with whom we should have a better understanding, and they are the salesmen for building equipment and the basic materials of construction. The manufacturers and corporations are constantly sending out men not to sell but to acquaint architects with informative data regarding their particular product. Some of these men bother the life out of us and our office. But is it entirely their fault? It is partly because they don't know how to see us and partly because they don't know how or what to tell us about their product when they do come in. We are making a proposition in Philadelphia that the manufacturers of the community will nominate their salesmen who are going to call on the architects in that community and get themselves together and establish a contact with our profession looking toward setting up a short course in architecture for salesmen. If you could do that in Detroit I suggest that you jointly arrange for about eight or ten weeks of intensive training, say, one night a week, and have one architect give a talk on one type of architecture and another on another type, another talk on planning both as to buildings and as to community development, another on the appropriate selection of materials and have at least one talk on the proper method of approach to an architect. We could help the manufacturers of building materials and their representatives and ourselves a great deal by such a course or series of popularized lectures. One talk ought to be on what the architect has to contend with and then they would realize some of the difficulties which we go through in our daily practice.

Somebody ought to compute statistics on how many salesmen or manufacturers' representatives try to see an architect in a day and then let each one of these know how impossible it is to see them all. The competitive manufacturers of the same line of products might even concentrate on one representative to call on architects to explain the complete "line." The final meeting ought to be a joint one with the Chapter with talks by selected representatives of each group.

Shoulder to Shoulder in Service to All

And last, gentlemen, and bringing to a close these informal remarks, I would like to suggest that we get to know each other better, and that we have closer contact not only with our visiting architects like those here tonight from Seattle, Houston, Boston, Chicago, and other places, but with ourselves in our own community. Attend our Chapter Meetings in large numbers as you have tonight. This is a wonderful meeting. All get better acquainted, rub together, round off the corners, and all get shoulder to shoulder in the service of the profession and in service to the community. (*Prolonged applause, all rising.*)



PENCIL SKETCH FROM THE NOTEBOOK OF FERENC IMREY

OLD FLOUR MILL, ELLENSBURG, WASHINGTON

FROM A PENCIL SKETCH BY HARRY LOCKLAND

Tradition

By Emery Kanarik

There is a time in a man's life—it comes to some when they are very young, to others late, to yet others never—when he thinks that he has thought a thought, or done a deed which he thinks is unique, which had not its equal in this world. Then he looks into the nearest mirror, and his eyes glitter. He is measuring his face for posterity, and thinks that it well compares with the mugs of the notorious of history. It is a thrilling moment, even if it is occasioned by nothing more than throwing a stone higher than the flagpole on Ben Metzer's general store.

The dénouement is a spiritual shock that helps build character . . . . It is a kick in the soft spot of a man's ego to discover that Fatso Hines can throw a stone so high you don't see it at all for a while; and that they tell of a boy from Montana that could throw them so high—they never came down. Anyway, that's the story. So a man's nose hangs low when next he glimpses it in a glass. AND he begins to respect things of the past. It is here that the weak first bend their knees, and the calibre of a man can be measured by the extent his knees remain bent from this first encounter with an intellectual exercise. The realization that there is an unknown factor to be reckoned with in his endeavors, which he cannot thoroughly grasp, is a serious blow to self-deification. It is rather a sinister affair to be conscious of all the great dead who are to be outdone if a merited greatness is to be achieved.

So an elementary misapplication of logic pedestalizes tradition, and causes the salaaming that is given to "good old times." Great thoughts have been thought in the past, great deeds have been done in the past. "My best had been outdone a hundredfold before I came on earth . . . . my greatest achievement is as child's play compared to the doings of my ancestors . . . . "; thus go a man's thoughts, and a man who is able to think thus far has enough of the divine egomania to want to believe that he is one of the chosen few of the earth, and that if *he* had been outdone, then the fellows of his age must also be outdone by the past. If his senses happen to show him that, indeed, his fellows *do* outdo him, and all his precious ancestors—then he resorts to the most childish of child tricks—he shuts his eyes and says that what is—is not, because he refuses to see it. He sits back and is assured that he is a man of culture, because men of culture have been known to appreciate the great things of the past, and he forthwith proclaims that only things of the past are worthwhile.

In this attitude there is sometimes a deeper slyness, a slyness which is undoubtedly reposing mainly in the subconscious. If, he reasons, excess of kindness for the past and men of the past becomes habitual with the race—why then he may have a share of this general immortality that will mistily cover all ages of the past like some dubious halo. . . . .

* * * * *

One cannot help viewing the critics of modern architecture, and architectural innovations—particularly those who overuse the words weird and queer and impermanent disease—with a little of the same disdain which they themselves employ. Of all the weapons with which any novel architectural idea, good or bad, is prodded—tradition is the most flashily flaunted. When reasoning fails, when logic fails, when facts and the witness of the senses fail then there is always the grand standby: tradition.

The mentioning of tradition is a password. Tradition—whose domain is in keeping alive charming customs of conduct, in perpetuating illogical and inoffensive idiosyncrasies of *conduct* is ridiculously misinterpreted, and is assumed to include the world of ideas, and is made to serve in keeping alive defunct vocabularies of beauty that have become clichés, and also ideas which are out of place in the present. Thus it is made to serve as a murderer of incentive and an enemy of reason. When an architectural custom that is obviously unreasonable at the present has in its favor nothing but that our grandfathers thought it was a grand thing; then it is staunchily defended as traditional, and criticizing it is classed somehow in the category of crimes which have to do with the robbing of corpses. When a traditionalist is asked why an architectural custom that is manifestly idiotic is kept up and defended, then he gets a Gioconda smile over him, and looks at one as if saying: "You are but young . . . . some day you shall be of the chosen . . . . mark my words . . . . some day . . . . ." With the advent of senility, one would suppose. And this, no matter what one's age may be—if one happens to follow one's own reason rather than that of the dead.

When they do condescend to drop the Mona Lisa then they are not above bringing to their criticisms of the developments of modern architecture any weapons that happen to be handy.

Morality? Indeed. It is surprisingly easy to prove that modern architecture is immoral. It is mechanistic, therefore flaunting nature, thus unnatural, and hence immoral. *Quod erat demonstrandum.* It boils down to that.

That morality is not universal and simple is too well known to need much explanation. The only manner in which architecture—to us—can be immoral is in the sense that the carvings of phallic symbols and the pictorial lessons in the intricacies of sexual congress on the walls of Indian temples are immoral to us. Yet it is obvious that a lack of them on his temple would be immoral to a Hindu.

Naturally, it is not this question that is involved. It is the unnatural that the traditionalists confuse with the immoral—and war against. Thus, to build a modern dwelling with the service portions to the street, and the living quarters facing a garden in the back is something new—it is unnatural. Something in the nature of an ingrown toenail, and quite immoral. Occasionally arguments which claim to have reason as their basis are brought up, but merely as sort of handmaidens to the great trump card—tradition.

Things of the past that have merit are so because they were inherently logical and reasonable at the time, and are so now, and not just because they are of the past. The traditionalists claim that a thing of the past is *ipso facto* to be hallowed merely because it is of the past. Chinese ancestor-worship fashion. To almost all men whatever they found in existence before they were born is natural,

FROM A PENCIL SKETCH BY HARRY LOCKLAND

whatever came after seems of the devil, and immoral. There are many people to whom the new fruits that Luther Burbank found by his experiments are somewhat shady, and they don't believe that they are any good. This tendency is universal, and men are intellectually able to achieve in direct proportion to their ability to combat it in themselves. A man must be a long time dead before his bust can be in a hall of fame.

It is true that men are creatures of habit, and that it is difficult to displace habitual things, no matter how unreasonable they are. That happens to be so and nothing can nor need be done about it. However, when those who have a bad habit are somewhat shamed of their weakness, then their natural course is to try to make that habit more or less universal—just so they have company in their dodging of reason. It is for this that a smoker will view a non-smoker with suspicion, and quite likely wouldn't trust him any too far. He senses one with a greater reasoning faculty, or a greater will-power, and naturally mistrusts him, as all men with active egos mistrust their superiors.

* * * * *

We may say that an architectural traditional custom is either beautiful or unbeautiful. If it is the former then it should not rely on tradition to keep it alive, but should be rediscovered by whoever wishes to employ it. It is only so that it can remain fresh, and not be—by being a tradition—overused and become a mere cliché and lose its appeal, even though it is intrinsically beautiful.

If, on the other hand, the tradition is unbeautiful, then it has no reason for existence, and tradition is then a tool in perpetuating ugliness. Brownstones were a tradition by the latter part of the nineteenth century.

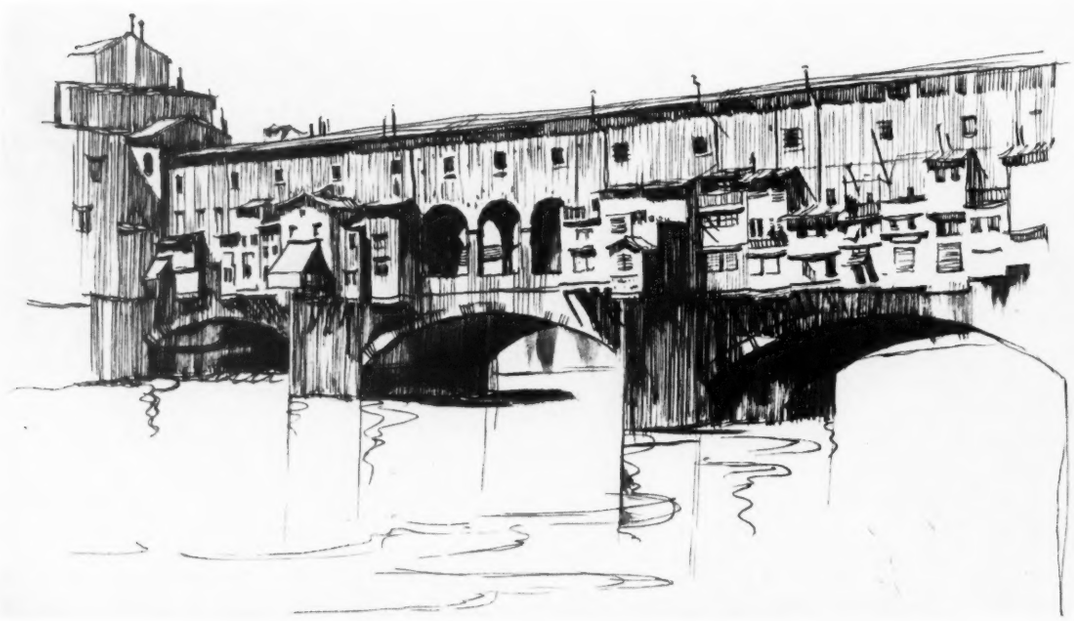
Leaving æsthetics; it may be assumed that an architectural custom is either intrinsically desirable or not. If it is desirable, then it was the result of clear reasoning: a problem grasped and solved. If such a custom becomes tradition, then it displaces reasoning in its adaptation, and can easily be grossly misunderstood and misapplied. In architecture—unlike in an exact science—every new problem has its own peculiar solution, and set rules and laws are a hindrance in solving the problem; for they reduce —through excusable laziness—the amount of clear thinking which should be applied to the problem for a clear solution. This in case the custom perpetuated by tradition is worthy.

If it is undesirable—such as, for example, making extraordinary expenses on the faking which will make a frame building look as if it were made of block construction—then its perpetuation by tradition is inexcusable.

Tradition's place, I repeat, is in perpetuating customs of no particular consequence. In etiquette, if you please. It is a pleasant excuse to choose one of the many equally satisfactory ways of setting a table, or of getting in and out of an automobile. It brings order. Family traditions are excellent, for they—like coats of arms—enable the members of the family to feel that they are individuals who matter, that they are one of a distinguished group.

As soon, however, as tradition is associated with ideas—with art, with literature, with music, with architecture, or with science—it is out of its domain and does mischief. It hinders the disassociation of ideas; which, Lord knows, is difficult enough to achieve anyway, and which is absolutely necessary for discovery and progress. And what is progress in architecture but the intelligent solution of the day's problem with the best tools available at that day?

A study of architectural history teaches nothing quite as plainly as that there is constant change in architectural development. It rests upon the architects of any period to make the change for the better, not for the worse, to progress and not to fall back. And for progress it is of the utmost importance to realize the exact importance of the past, and neither to make a fetich of it nor disregard it and become wild about anything *merely* because of its newness, whether worthwhile or not. Fetiches are cumbersome baggage for progress, indeed.



PONTE VECCHIO, FLORENCE—FROM A PEN-AND-INK SKETCH BY ALWIN RIGG

A *Vade Mecum* for Draftsmen

By Don Graf

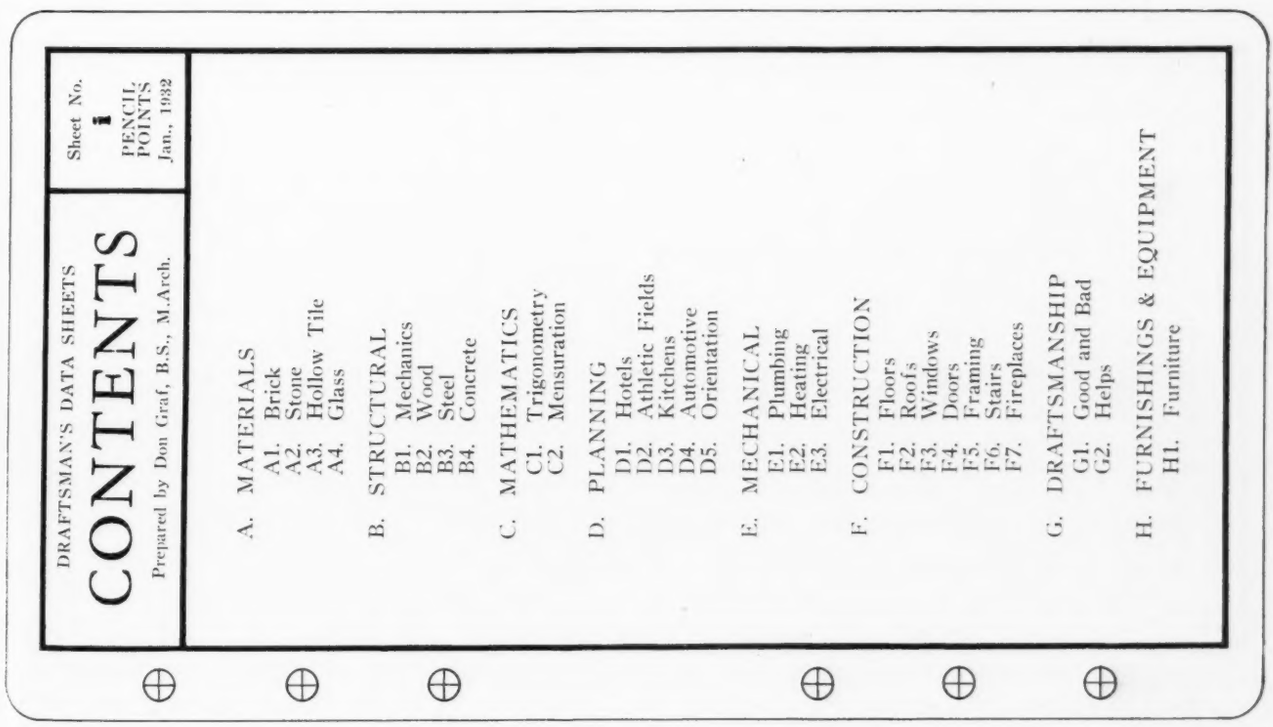
The man who directs the production of the World Almanac, reference book extraordinary, says that few persons know where to go to find facts and how to find them after they get there. Which all sounds very much as if he had worked in an architect's office at some time or another. For have you ever felt the burning eye of the chief upon you as you painfully searched through books and catalogs for some simple fact needed on a drawing, with the guilty feeling that you ought to remember it but somehow couldn't? And the hesitancy to confess your ignorance to the boss, fearing to force an embarrassing admission that he didn't know either?

This month, PENCIL POINTS is presenting the first of a series of data (pronounced "day-tuh") sheets taken from the notebook of a draftsman who decided that it is often more important to be able to find a fact than to clutter up your brain with it as a permanent tenant. And easier, too. Johnson said, "Knowledge is of two kinds. We know a subject ourselves or we know where we can find information upon it." Each month four of the sheets will appear, giving information found by actual experience to be needed at the drafting table, presented in complete but succinct form, and reproduced in the magazine so that they may be easily preserved for use.

Many offices have the office standards drawn up in data (not "datt-a") sheet form, but their scope is limited usually to some special office problem. It was several years ago that a group of eight or ten draftsmen, at a weekly lunch-club gathering, decided on a scheme to cover a more general field of information. The idea was that each one would prepare one sheet of information he had found useful each month, these pages to be printed and distributed so that every man would have a copy of every sheet. This was an easily workable plan, and the first month every draftsman produced his leaf as per schedule. But the end of the second month found only three to have maintained their interest, and the third month saw everyone in default and the idea died then and there.

This scribe, however, decided to carry it on as a private enterprise, so that one notebook continued to grow, and is still growing as questions arise over the drafting table and the answers as found are recorded for repeated future reference. The book has acquired thumb prints, tatters, and cigarette burns, and bears these scars as proof of hard and frequent use. Many times it has caused its owner hard looks and vituperation when he had the temerity to remove it from some other office slave that he might refer to it himself. But in various offices in the Middle West, in Florida during the haste of the boom, and in the refined and deliberate atmosphere of Boston, this book has saved many times the hours spent in preparing its contents.

Into this compendium has gone data (not "dott-uh") from countless sources. The catalogs, handbooks, texts, and letters that have been briefed for the series of sheets would cover the ordinary drafting table waist-deep. The cross-questioning of material men, contractors, and other experts alone would, if put end to end, reach into the middle of next month. Nothing has been included unless


DRAFTSMAN'S DATA SHEETS

CONTENTS

Prepared by Don Graf, B.S., M.Arch.

Sheet No. 1

PENCIL POINTS Jan., 1932

A. MATERIALS
- A1. Brick
- A2. Stone
- A3. Hollow Tile
- A4. Glass

B. STRUCTURAL
- B1. Mechanics
- B2. Wood
- B3. Steel
- B4. Concrete

C. MATHEMATICS
- C1. Trigonometry
- C2. Mensuration

D. PLANNING
- D1. Hotels
- D2. Athletic Fields
- D3. Kitchens
- D4. Automotive
- D5. Orientation

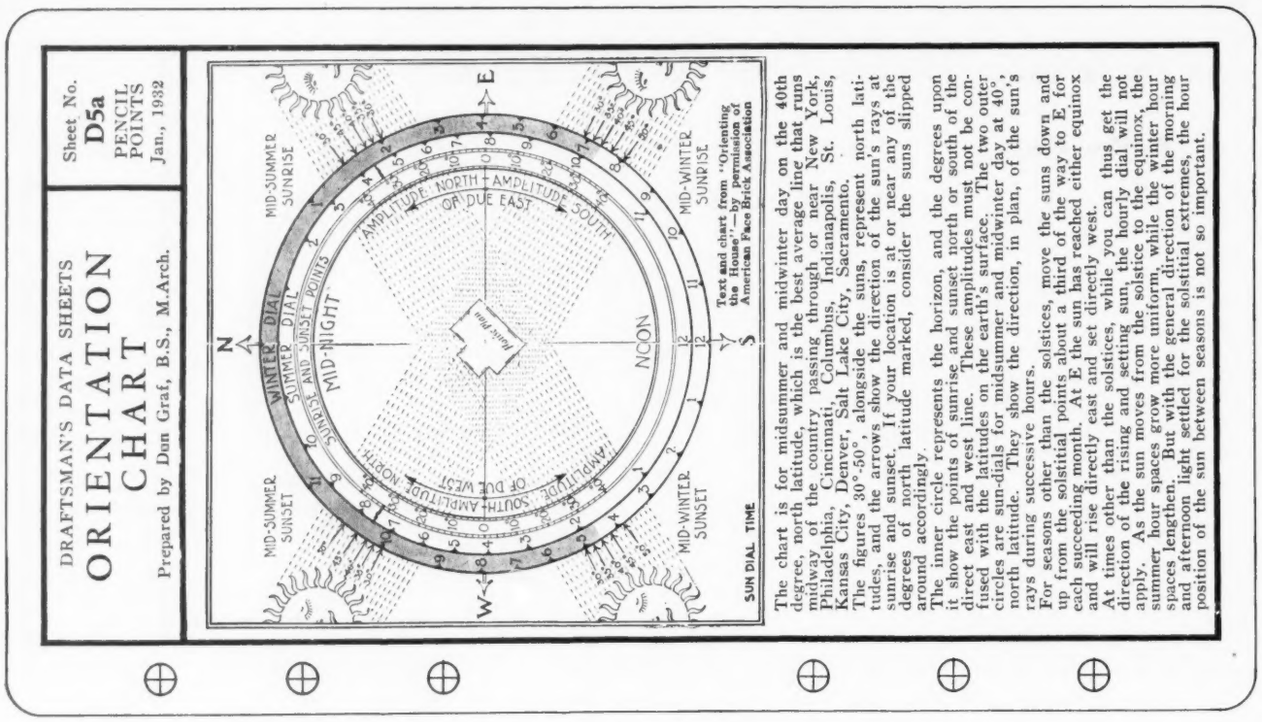
E. MECHANICAL
- E1. Plumbing
- E2. Heating
- E3. Electrical

F. CONSTRUCTION
- F1. Floors
- F2. Roofs
- F3. Windows
- F4. Doors
- F5. Framing
- F6. Stairs
- F7. Fireplaces

G. DRAFTSMANSHIP
- G1. Good and Bad
- G2. Helps

H. FURNISHINGS & EQUIPMENT
- H1. Furniture

DATA SHEET NO. 1. *The sheets will not appear in order so the table of contents will enable you to file them properly in your notebook, regardless of their publication chronology.*


DRAFTSMAN'S DATA SHEETS
ORIENTATION CHART
Prepared by Don Graf, B.S., M.Arch.
Sheet No. D5a
PENCIL POINTS
Jan., 1932
MID-SUMMER SUNRISE
MID-WINTER SUNRISE
MID-SUMMER SUNSET
MID-WINTER SUNSET
WINTER DIAL
SUMMER DIAL
SUNRISE AND SUNSET POINTS
MID-NIGHT
NOON
AMPLITUDE NORTH + AMPLITUDE SOUTH OF DUE EAST
AMPLITUDE SOUTH + AMPLITUDE NORTH OF DUE WEST
Plate Plan
N
E
S
W
SUN DIAL TIME
Text and chart from "Orienting the House" by permission of American Face Brick Association
The chart is for midsummer and midwinter day on the 40th degree, north latitude, which is the best average line that runs midway of the country passing through or near New York, Philadelphia, Cincinnati, Columbus, Indianapolis, St. Louis, Kansas City, Denver, Salt Lake City, Sacramento.
The figures 30°-50°, alongside the suns, represent north latitudes, and the arrows show the direction of the sun's rays at sunrise and sunset. If your location is at or near any of the degrees of north latitude marked, consider the suns slipped around accordingly.
The inner circle represents the horizon, and the degrees upon it show the points of sunrise and sunset north or south of the direct east and west line. These amplitudes must not be confused with the latitudes on the earth's surface. The two outer circles are sun-dials for midsummer and midwinter day at 40° north latitude. They show the direction, in plan, of the sun's rays during successive hours.
For seasons other than the solstices, move the suns down and up from the solstitial points about a third of the way to E for each succeeding month. At E the sun has reached either equinox and will rise directly east and set directly west.
At times other than the solstices, while you can thus get the direction of the rising and setting sun, the hourly dial will not apply. As the sun moves from the solstice to the equinox, the summer hour spaces grow more uniform, while the winter hour spaces lengthen. But with the general direction of the morning and afternoon light settled for the solstitial extremes, the hour position of the sun between seasons is not so important.

DATA SHEET NO. D5a. *This has been found useful in laying out tennis courts, greenhouses, and planting, as well as in the location of the rooms of a house. You can tell Mrs. McFiniky exactly what time the sun will arrive and depart (if it doesn't rain) in any room that worries her. For those with only a cursory astronomical education, "solstice" is the time of year when the sun is at its greatest declination either north or south, usually occurring on June 21st and December 22nd. (Say sahl-stiss.) Equinox (ee-kwin-ocks) is the time at which the sun crosses the celestial equator.*

it has proceeded from a reliable and authoritative source, and in every case it is presented with the purpose of eliminating wasted time in arriving at the nub of the subject. It is regrettable that those whose business it is to supply architects with information on their products or services find it necessary to garnish the roast lamb of useful facts with so much parsley of ballyhoo. Sometimes it is a bit of a job to find the meat. The things a man needs to know as he makes a drawing are basic things—how big or how thick is it, how is it built into the building, how does it operate, what size should be used, what does it look like in a well-made scale drawing, what does it accomplish? These are the sort of ever-recurring questions that the data (not "daw-tuh") sheets will try to answer regarding materials, planning, and construction.

The original draftsman's notebook was letter size, 8½" by 11", but this was discarded and the 3¾" x 6¾" size adopted, having been found in actual use to be more practical for several reasons. First, when the book was being used and laid open on the drafting board, it took up less of that valuable area, and was not so prone to stymie the end of the T-square or to foul the 45. Then, the limited amount of space on the smaller sheets required the omission of unnecessary detail in the arrangement of the illustrations and text, and made it imperative to present the material in the most brief to-the-point form. A third advantage is the variety of blank forms available at most stationers for recording practically any type of information—tear out sheets for scraps of information, coordinate paper for making graphs, log-log and semilog, blank and ruled paper, at the same size of the sheets appearing in PENCIL POINTS.

Very little originality is claimed for the material which will be presented, it being largely in its form and selection of material that its compiler deserves credit or censure. Some original work has been done, but thanks is in the main due to the many firms and individuals who have cheerfully answered questions and furnished information. The Southern Pine Association, The Indiana Limestone Company, and the Northern Hemlock and Hardwood Manufacturers Association especially deserve grateful mention for the helpful spirit in which they responded to requests for data (not "datt-er").

It is hoped that the readers will not hesitate to write with criticisms and suggestions to make this feature of PENCIL POINTS more useful to those "in the bonds." No doubt many will have dope which they have found valuable to themselves and which would make good data sheets. If they are willing to see it in print, such material will be gratefully received and acknowledged. Also if there is any sort of information of general interest that any one wants, write in, and every effort will be made to print a sheet covering it.

It is suggested that the value of these pages will be most fully realized if they are read over each month as they appear, so that the user will become familiar with what they contain. Then they should be carefully trimmed and punched, and filed in the notebook according to letter first, then numeral, and then lowercase letter. A one-inch ring stiff canvas notebook cover is recommended, which costs about a dollar and thirty cents. . . . And just in case there is some doubt, the word "data" is the plural of "datum," means facts, and is pronounced "day-tuh"!

DRAFTSMAN'S DATA SHEETS

Capacity of Tanks

Prepared by Don Graf, B.S., M.Arch.

Sheet No. **C2c**
PENCIL POINTS
Jan., 1932

CYLINDRICAL TANKS

Depth or Length	DIAMETER 18-in.	24-in.	30-in.	36-in.	42-in.	48-in.	54-in.	60-in.
1 Inch	1.10	1.96	3.06	4.41	5.99	7.83	9.91	12.24
1 ft.	13.	23.	37.	53.	72.	94.	119.	147.
1½ ft.	20.	35.	55.	79.	108.	141.	179.	220.
2 ft.	26.	47.	73.	106.	144.	188.	238.	294.
2½ ft.	33.	59.	92.	132.	180.	235.	298.	367.
3 ft.	40.	71.	110.	159.	216.	282.	357.	441.
3½ ft.	46.	82.	129.	185.	252.	329.	417.	514.
4 ft.	53.	94.	147.	211.	288.	376.	476.	587.
4½ ft.	59.	106.	165.	238.	324.	423.	536.	661.
5 ft.	66.	117.	183.	264.	360.	470.	595.	734.
5½ ft.	73.	129.	202.	291.	396.	517.	657.	808.
6 ft.	79.	141.	221.	317.	432.	564.	714.	881.
7 ft.	92.	164.	257.	370.	504.	658.	833.	1028.
8 ft.	106.	188.	294.	424.	576.	755.	952.	1175.
9 ft.	119.	212.	330.	476.	644.	846.	1071.	1322.
10 ft.	132.	235.	372.	530.	720.	940.	1190.	1475.
12 ft.	157.	282.	440.	634.	864.	1128.	1428.	1755.
14 ft.	185.	329.	514.	740.	1000.	1316.	1665.	2056.
16 ft.	211.	376.	587.	846.	1152.	1500.	1904.	2350.
18 ft.	238.	423.	661.	952.	1296.	1692.	2142.	2644.
20 ft.	264.	470.	734.	1057.	1440.	1880.	2430.	2940.

To find how many U. S. gallons a cylindrical tank will hold: Multiply the square of the inside diameter by 0.7854, which gives the area; multiply that result by the depth and this gives the cubic contents of the tank. If measurements are in inches, divide the cubic contents by 1728 and you then have contents expressed in cubic feet; then multiply by 7.4805 (U. S. gallons in each cubic foot of water) and the final result is the number of U. S. gallons the tank will contain.

RECTANGULAR TANKS

To find how many U. S. gallons any rectangular tank will hold: Multiply the inside length, depth and width, which gives the contents of the tank in cubic inches, or in cubic feet, as case may be. If in inches, divide by 1728 and you have the contents in cubic feet. Then multiply that result by 7.4805 (U. S. gallons in each cubic foot of water) and the final result is the number of U. S. gallons the tank will contain.

A gallon of water (U. S. standard) weighs 8⅓ lbs. and contains 231 cubic inches.

A cubic foot of water contains 7½ gallons, 1728 cubic inches, and weighs 62½ lbs.

DRAFTSMAN'S DATA SHEETS

1931 Motor Car Dimensions

Prepared by Don Graf, B.S., M.Arch.

Sheet No. **D4c**
PENCIL POINTS
Jan., 1932

MAKE	*(L.)	*(W.)	*(H.)	*(T.D.)
Ford "A"	●12′-8⅝″	5′-7¼″	5′-10½″	●34′-0″
Whippet 98B	13′-2⅜″	5′-7½″	5′-9⅜″	38′-6″
Chevrolet	13′-9⅝″	5′-8⅝″	5′-11¾″	42′-6″
Plymouth	13′-11⅛″	5′-6¼″	5′-10½″	41′-0″
Pontiac	13′-11⅝″	5′-9⅝″	5′-9½″	39′-10½″
De Soto	14′-0⅞″	5′-6¼″	5′-10½″	41′-0″
Chrysler (6)	14′-1¼″	5′-6¼″	5′-10½″	41′-0″
Oldsmobile	14′-1⅝″	5′-9″	5′-10″	41′-6″
Dodge Six	14′-1¾″	5′-8¼″	5′-10½″	41′-0″
Willys-Knight	14′-2½″	5′-10″	5′-9⅜″	37′-2″
Roosevelt	14′-3⅞″	5′-8¼″	5′-10¼″	35′-8″
Nash 660	14′-4⅛″	5′-9″	5′-9¼″	41′-8″
Studebaker	14′-5″	5′-9¼″	5′-11″	41′-0″
Buick 8-51	14′-5¼″	5′-9¾″	5′-11″	39′-0″
Essex	14′-6″	●5′-5″	5′-11″	40′-0″
Marmon 69	14′-8¾″	5′-8″	6′-0″	41′-0″
Dodge Senior	14′-8⅞″	5′-8¼″	6′-1⅛″	42′-9″
Oakland 101	14′-9⅝″	5′-9⅝″	5′-9¼″	40′-10″
Graham-Paige	14′-10″	5′-8″	5′-10½″	40′-6″
Buick 8-67	15′-2⅛″	5′-11⅜″	6′-0″	39′-6″
Chrysler (8)	15′-6¾″	5′-9⅞″	5′-9½″	45′-0″
Viking	15′-8″	5′-10″	6′-0″	47′-0″
Hudson (8)	15′-9″	5′-7″	5′-11″	44′-0″
Franklin	15′-10″	5′-11″	6′-0″	43′-0″
Marmon 79	15′-11″	5′-10″	6′-2″	44′-0″
Auburn	16′-1¾″	6′-0″	●5′-9″	41′-8″
Cord	16′-6″	▲6′-2″	5′-1″	46′-0″
Buick 8-90	16′-6⅜″	5′-11⅜″	6′-1¾″	45′-6″
Graham-Paige	16′-8½″	5′-10″	6′-2″	47′-4″
La Salle	16′-11″	5′-11⅛″	6′-1¼″	49′-9″
Studebaker	17′-2″	5′-11⅜″	6′-1″	52′-8″
Hupmobile	17′-2⅞″	6′-0″	▲6′-2⅞″	——
Pierce-Arrow 144	17′-7½″	5′-11⅜″	6′-0½″	48′-10″
Packard 745	17′-6½″	5′-10⅜″	5′-11¼″	56′-0″
Lincoln	18′-4″	6′-0⅛″	6′-1″	53′-10″
Cadillac 452	▲18′-4⅛″	▲6′-2″	6′-2¾″	▲56′-2′

* (L.) Length, (W.) Width, (H.) Height, (T.D.) turning diameter, i.e., diameter of smallest walled-in circle in which the car will make a complete turn. Dimensions are given to the nearest eighth inch.

●=Smallest dimension in column.

▲=Largest dimension in column.

Information is supplied by automobile manufacturers. Where makes are repeated figures are for smallest and largest models.

Thanks to Ramp Buildings Corporation.

DATA SHEET NO. C2c. *This sheet is useful in making proper provision for oil fuel storage, gasoline pump supply, hot water storage in large buildings, and sprinkler tanks for fire protection. The contents of wells and cesspools or any other cylindrical vessel may be determined.*

DATA SHEET NO. D4c. *The planning of drives, turnarounds, and parking spaces as well as garages requires the dimensions given on this sheet. Inasmuch as there are many of last year's cars, not to mention those of 1929, still in use, additional sheets on these models will follow in coming numbers.*

NEXT MONTH. That famous drafting room mystery, how to determine the hand and bevel of doors and locks, will be dispelled, as well as some dope on framing for dormer windows, and the first of a series of sheets giving the vertical dimensions of brickwork with a scale for drawing the jointing.

HELP! Will everybody write and tell me what sheets they would like especially. To make the "Draftsman's Data Sheets" most useful to you let me know what type of dope is most useful. Criticism and suggestions always welcome. Wilburg A. B.—Send address. Dick H.—ditto.

THE FIFTH COMPETITION FOR THE A. W. BROWN TRAVELING SCHOLARSHIP FOR 1932

Announcement is made of the fifth competition for the selection of a beneficiary for the A. W. Brown Traveling Scholarship. This competition is held under the direction of a committee of the American Institute of Architects. Programs will be mailed to approved applicants about March 7, 1932, drawings to be delivered on or about April 6, 1932.

The scholarship is the gift of Ludowici-Celadon Company and is a memorial to the late A. W. Brown, who was for many years president of that company and a leader in the manufacture of roofing tile.

The amount of the scholarship is two thousand dollars, to be used towards defraying expenses of a year of travel and study in Europe by a worthy and deserving architect or architectural draftsman. Traveling expenses between the winner's place of residence and the port of New York will be paid in addition to this amount.

An award of two hundred and fifty dollars will be made to the person whose design is placed second in the competition; one hundred and fifty dollars to the person whose design is placed third; and one hundred dollars to the person whose design is placed fourth.

Under the terms of the gift the selection of the beneficiary of this scholarship is to be made by means of a competition to be held under the direction of a committee of the American Institute of Architects, the drawings to be judged by a jury of from three to five practicing architects chosen by that committee. The general requirements of the problem given for the competition will be similar to those of the Class A problems issued by the Beaux-Arts Institute of Design. In making the award of the scholarship the committee will give due consideration to the personal qualifications of the competitors as well as the excellence of the designs as judged by the jury.

It is stipulated by the donors that the competition shall be open to any architect or architectural draftsman who is a citizen and resident of the United States; who has never been the beneficiary of any other European scholarship; who has passed his twenty-second but has not passed his thirty-second birthday on May 1, 1932, and who has been in active practice or employed in the offices of practicing architects for at least six years, or, if a graduate of an architectural school, at least two years since graduation.

The beneficiary will be required to spend the first two or three months of his time abroad as a student at the American School of Fine Arts at Fontainebleau, except under special conditions when the committee may at its discretion waive this requirement. He will also be required to complete, during his European study, two envois, which shall consist of measured drawings of buildings on which burnt clay has been used for roofing. Other than this there will be no restrictions as to the type of architecture that shall be studied, or the type of work that shall be done, except as the committee may deem it necessary to advise from time to time in order that the intention of the establishment of the scholarship may be realized.

Those wishing to compete should write for application blanks to the secretary of the committee, Wm. Dewey Foster, 25 West 45th Street, New York.

DETROIT ARCHITECTURAL BOWLING LEAGUE

	W.	L.
Albert Kahn, Inc.	23	16
Hubbard & Wagschal	23	16
Malcomson & Higginbotham & Trout	21	18
McGrath & Dohmen	21	18
Robert O. Derrick, Inc.	20	19
Weston & Ellington	20	19
Donaldson & Meier	17	22
J. Ivan Dise	11	28

Individual High Score—1 game—Golder (M&H&T)—276

Individual High Score—3 games—F. McCormick (M&D)—672

Team High Score—1 game—McGrath & Dohmen—1063

Team High Score—3 games—McGrath & Dohmen—3029

Leading 200 scorer—Golder (M&H&T) —17

High Individual Averages:

		G.	Av.
1.	Jolson (ROD)	36	192
2.	Stegkamper (JID)	36	192
3.	Golder (M&H&T)	39	192
4.	Kalsched (AK)	36	191
5.	Gleasman (ROD)	39	189
6.	F. McCormick (M&D)	39	186
7.	N. Krecke (H&W)	27	185
8.	Ozias (W&E)	35	185
9.	Nygren (D&M)	39	181
10.	Bruny (W&E)	33	181

GERARD DRAFTING SCHOOL

The Gerard Drafting School, 157 Main Street, White Plains, N. Y., is now open for instruction in drafting, architectural and mechanical plan reading, and estimating. The school has the complete equipment of an architect's office with architects, engineers, and a former contractor in charge. There are day and evening classes. A limited number of draftsmen and building mechanics who have been out of employment for the past six months will be admitted free of tuition.

NEW EDITION OF STEVENS MASTER SPECIFICATIONS

A new edition of *Stevens Master Specifications*, compiled and edited by Frank B. Stevens, Jr., 7117 East End Avenue, Chicago, is just off the press. The specifications have been revised and enlarged. The new volume includes specifications for "Inspections and Tests," which Mr. Stevens has worked up in collaboration with the National Engineering Inspection Association, as well as specifications for "Painting," which initiate inclusion of "Guarantee" and "Bond" clauses. The book is published by Stevens Master Specifications, Inc., 165 West Wacker Drive, Chicago, Illinois, and is sent without charge to all architects on their mailing list.

THE NEW ERNEST WATSON SERIES

Because of the special interest of architectural delineators and landscape architectural draftsmen in the matter of drawing tree forms we call attention to the new series of drawings by Ernest W. Watson of which the first appears on page 41 or our advertising section. This is the first of a series of tree drawings which will run during 1932.

THE NEW YORK ARCHITECTURAL CLUB, INC.

As announced in the December, 1931, number of PENCIL POINTS, The New York Architectural Club has moved to the 18th floor at 120 East 41st Street, New York.

The new quarters have a comfortable and homelike atmosphere. Being high up, an excellent view is enjoyed from the many windows, including some of the world's most famous buildings and bridges. However, some of the old "regulars" miss the busy hum of activity presented by 42nd Street.

The club Atelier has gained an exceptionally good working space and the students have been turning out some unusually good work. This, combined with the exceptionally low dues, has been a veritable magnet in attracting gifted students to the Atelier. The Life Class holds a two and one-half hour session every Friday night starting at 7:30 P. M., and the demand is increasing to the extent that the club is considering holding an additional session in Life Drawing each week, on Tuesday nights.

While the club will only occupy this space until Spring, a busy time is being planned. Several lectures are being arranged for the weeks ahead, which will be of interest to all architectural men. Every Tuesday evening will be open club night, at which time there will be informal discussions on architectural subjects, game tournaments, and general social activities. Plans are being made which, it is hoped, will find the club in more permanent quarters before many months. These plans would have been completed during the past year, had it not been for the unusual situation in the architectural and building fields. The membership is hopeful for an early improvement and is trying not to let down in its activities.

All architectural men are invited to join the club, and become active participants in the broad program mapped out.

ATELIER ADAMS-NELSON HOLDS SMOKER

Atelier Adams-Nelson of the Chicago Architectural Sketch Club held its fortieth annual smoker at the Atelier, 1801 Prairie Avenue, Chicago, on November 23rd, in accordance with the Club's custom to have the date of the smoker coincide with that of the patrons' dinner of the Ecole des Beaux Arts.

Alfred H. Granger, recently returned from a year abroad, was guest of honor and he, together with William E. Parsons, Edward H. Bennett, Arthur F. Adams, Joseph F. Booton, Arthur F. Deam, Francis Puckey, and Andrea Rebori, were elected *ancien patrons* of the Atelier, which the students felt they had merited because of their financial and working support in the past.

The Atelier is looking forward to another equally successful Beaux-Arts season and has provided a new assistant patron to Mr. Nelson—Walter E. Trevett who attended Harvard and has just returned from a year's travel in Europe.

Officers of the Atelier for the coming year are: Thomas J. Mulig, Massier; Harry Larson, Sous Massier; Albert Bohre, Secretary, and Albert Eiseman, Jr., President.

The Atelier's senior patron is Donald S. Nelson.

ARCHITECTURAL BOWLING LEAGUE OF NEW YORK

The Architectural Bowling League of New York opened its twenty-fourth bowling season on October 1st, 1931, at Thum's White Elephant Alleys, Broadway and 31st Street, New York.

Sixteen architectural offices are represented in the three contests, namely the five, three, and two man tournaments.

The officers of the league for the ensuing year are: T. W. Biddle, President; William Meyer and John Boden, Vice Presidents; John M. Murray, Treasurer; A. C. Liska, Financial Secretary; E. L. Capel, Corresponding Secretary; P. M. Lynch, Custodian.

The bowling takes place every Thursday night, starting at 7:00 P. M., and will continue until May, 1932.

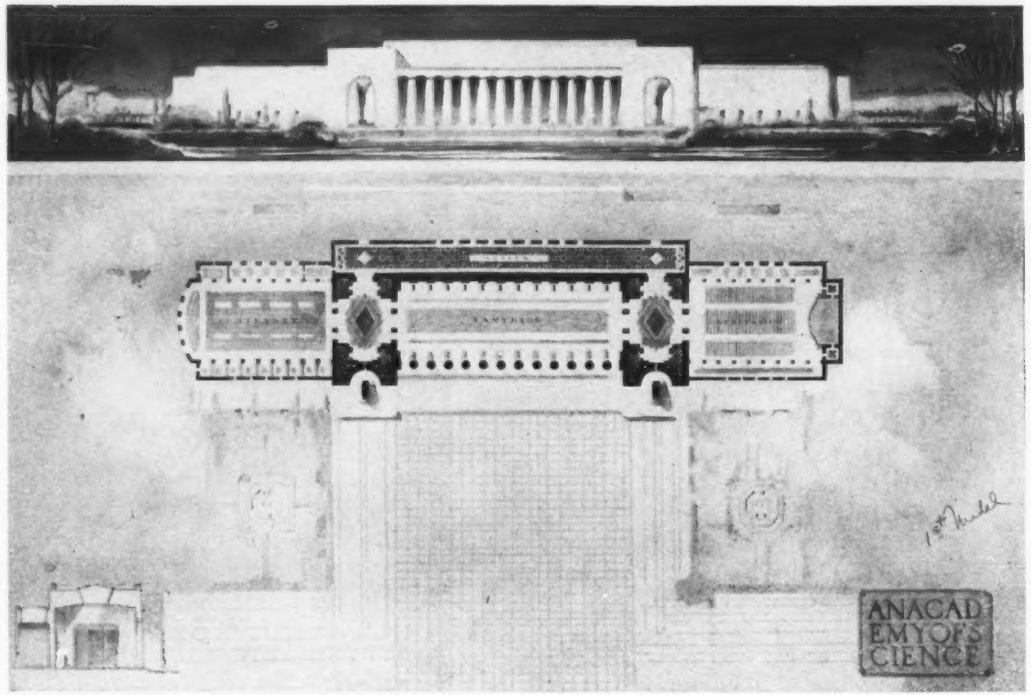
The team standing on Nov. 19th was as follows:

Office of	W.	L.	Team High Score
1. W. C. Martin	10	2	911
2. John Eberson	10	2	807
3. Voorhees, Gmelin & Walker	9	3	821
4. Delano & Aldrich	8	4	812
5. Cass Gilbert	8	4	834
6. James Gamble Rogers	8	4	747
7. Andrew J. Thomas	7	5	968
8 W. C. Sommerfeld	7	5	835
9. Schwartz & Gross	6	6	829
10. Tooker & Marsh	5	7	768
11. Grosvenor Atterbury	4	8	739
12. Reinhard & Hofmeister	4	8	719
13. Emery Roth	4	8	703
14. Starrett & Van Vleck	3	9	803
15. Warren & Wetmore	2	10	747
16. Guilbert & Betelle	1	11	810

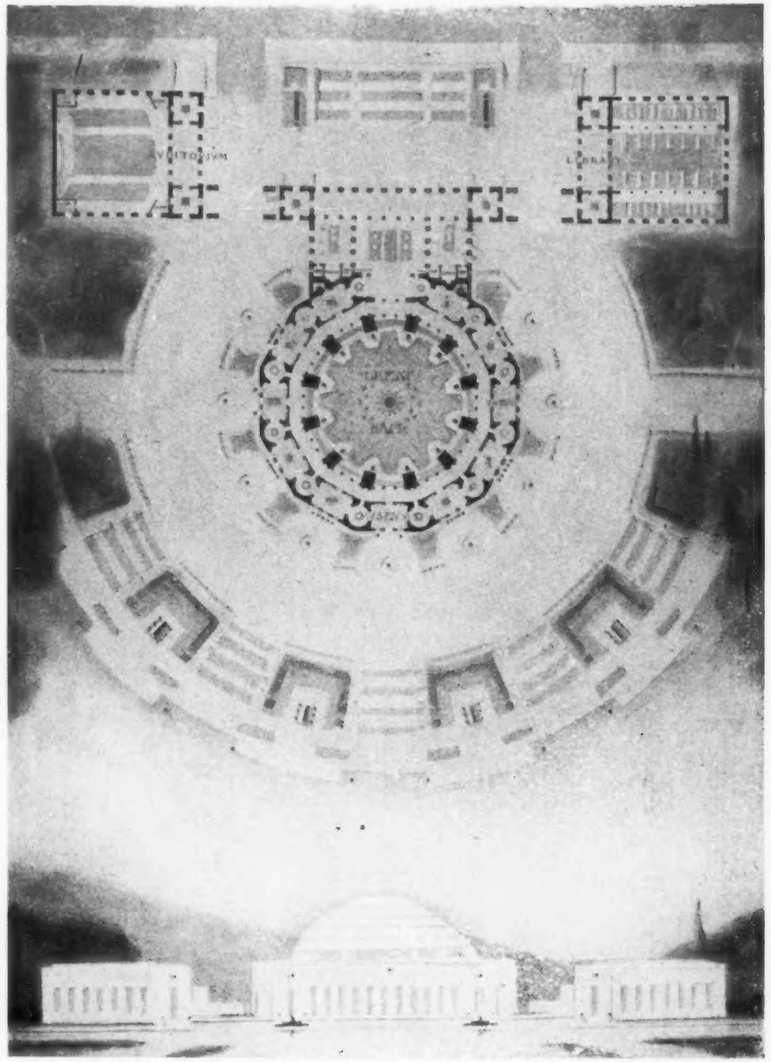
Individual High Score, Joseph Reiss, of Cass Gilbert—267

E. L. CAPEL, *Secretary*, 18th Floor, 120 East 41st Street.

ELY JACQUES KAHN, NEW YORK ARCHITECT, SHOWN WITH HIS PORTRAIT BUST AND THE SCULPTOR, DAVID EVANS



BY L. S. DOUGLAS, YALE



BY LESTER W. SMITH, PRINCETON

FIRST MEDAL DESIGNS FOR "AN ACADEMY OF SCIENCE," YALE-PRINCETON INTERCOLLEGIATE COMPETITION IN ARCHITECTURE

Princeton-Yale Intercollegiate Competition in Architecture

The annual competition between Princeton and Yale in the work in design by students in their final year, was decided on Tuesday, December 1st, at Princeton. Ten drawings from each University were entered.

The competition concerned the design for a large "Academy of Science" such as might possibly be built at Washington on the banks of the Potomac. The requirements were: a large and monumental Hall in which were placed statues of the twelve most eminent scientists in the country; a Museum in which models of their inventions could be displayed to the public; a Library which would contain scientific books and data for consultation; and an Auditorium in which meetings and lectures could be held. The variety of the solutions was extremely interesting, ranging from "Pantheons" in which the statues were placed, to long rectangular halls with the statues strung along one side for the public to pass by and view them.

This competition, which has been an annual affair for several years now, has furnished the greatest amount of interest among the students of both universities, and for them it has become the most absorbing work which they do during the year, particularly since they have as a jury a number of the most prominent architects in the country. It becomes in this way analogous to the important competitions which take place among practicing architects for such buildings as the Roosevelt Memorial, the Lincoln Memorial, and so on. The jury this year consisted of George Howe, Chairman; Ralph T. Walker, and Thomas Locraft, a former winner of the Paris Prize in Architecture, now practicing in Washington, and therefore conversant with the type of problem used this year; as well as the two critics, Otto Faelton, of Yale, and Jean Labatut of Princeton.

The following awards were made: *First Medals*, Lester W. Smith of Princeton, and L. S. Douglas of Yale. *Second Medals*, W. F. R. Ballard, F. G. Frost, Jr., W. L. Gordon, J. E. Trudeau, Rowland Ulmer, and A. O. Willauer, all of Princeton, and E. V. Johnson, C. R. Moberg, and C. F. Poehler of Yale. *Mentions*, J. E. Blanton, G. M. Payne, Jr., and R. G. Stout of Princeton, and R. Ayres, C. F. Hegner, Jr., J. Timpson, and W. Turnbull of Yale. *Half-Mentions*, B. J. Harrison and F. S. Massari of Yale.

A SECOND LETTER FROM THE ARCHITECTS LEAGUE OF NORTHERN NEW JERSEY

"To all Chapters of the American Institute of Architects and all other Architectural Organizations.
"Dear Sirs:

"As a result of our letter of November 7th, we have received great encouragement from many architects and organizations. A committee is now forming of delegates from the overwhelming number of organizations in and around New York City that are in favor of severing the tie between the American Institute of Architects and the Architects' Small House Service Bureau.

"President Hoover's Conference on Home Building and Home Ownership, which after a year's work will meet in Washington, December 2nd to 5th, would seem to offer a fine opportunity to further the splendid work of architects in the residential field. We hope this will be the case despite the fact the president of the Architects' Small House Service Bureau was appointed the Presidential advisor and is Chairman of the Committee on Design. Seven of the twenty-five members of the committee are Bureau officials. We feel that the Bureau has given itself a top-heavy representation considering that those opposed to the bureau are apparently not represented at all. We sincerely hope the conference will result in something better than more stock plan and mass production propaganda. Some good may come from the financial division if the proposed real estate bank functions to provide mortgage money on a par with that provided by those companies that embrace design, finance and construction into one contract.

"The Bureau sells its plans to such companies. The architect is completely eliminated. This type of firm is not confined solely to the residential field and the profession may sometime be forced to take issue in this matter in self-protection. The aforesaid sales of Bureau plans would tend to prove extremely embarrassing unless either this practice or the endorsement be stopped.

"Leading architects publicly sponsor and endorse Bureau plans. Consequently the plans are open to the public scrutiny. Procure the December issue of one of Woolworth's five-and-ten-cent-store magazines, 'Love,' 'Home,' 'Movie,' and 'Detective,' you will find a three-page article illustrating the first of a new series of four designs by the Architects' Small House Service Bureau. Consider the stairway to the second floor. It starts from the breakfast nook on the first floor plan; on the second floor plan it apparently descends to the sleeping porch; the article says it starts from the back hall. The chimney back of the refrigerator evidently stops at the ceiling for it does not appear on the second floor plan at the head of the stairs to block the passage to the bedroom. Furthermore we count seven rooms. The A.I.A. restricted the Bureau to six rooms. The article asks for criticisms so we have complied. Gordon Allen of Boston once wrote, 'Even if these organizations designed better than they do, I should never be in favor of their endorsement by the American Institute of Architects, which I consider unwise and thoroughly immoral.'

"The North Central Division of the Bureau writes us as follows: 'Out here, the so-called General Contractor is our arch enemy.' Such an attitude is not what one might call a tactful way of securing the friendship that may be direly needed sometime. Such statements, mistakes, unwise sales and disloyal propaganda, of course, can be apologized for by the Bureau but as long as the endorsement holds, the entire profession must be humiliated too.

"We feel that either the Architects' Small House Service Bureau should voluntarily resign from the endorsement and stand on its own merits as the architects must do, or the Institute should release itself and be free to further the immediate interests of the Architectural Profession, without a questionable consistency of purpose.

"The architect of today is being hit on all sides. Large construction companies offer architectural service as a mere adjunct to their businesses, the Federal Government is providing its own architectural services and the Architects' Small House Service Bureau is widely educating the public to low fees and cheap stock plans. Let us rid ourselves of this disunity in our own ranks and unite in our common interests for self-preservation, and strive together for public recognition of the real value of the architect's services. We can then secure legislative protection and with building permits and mortgage loans made only on registered architect's plans the public will be better served and the architect can maintain his place as the logical head of every building operation.

"Your opinion either for or against will be of great value in determining the issue. Please send it to us as soon as possible, if you have not already done so.

"Sincerely and fraternally yours,

"(*Signed*) CLARENCE H. TABOR, JR.,
"*President.*"

WOMAN'S ARCHITECTURAL CLUB OF CHICAGO

The Woman's Architectural Club of Chicago has started on its winter's work enthusiastically and with increased attendance. Plans for the coming year include two meetings a month, one a working meeting for discussion, study, and the preparation of an exhibit. The second meeting of the month is to be a social meeting, dinner with a guest speaker or a tour of general interest.

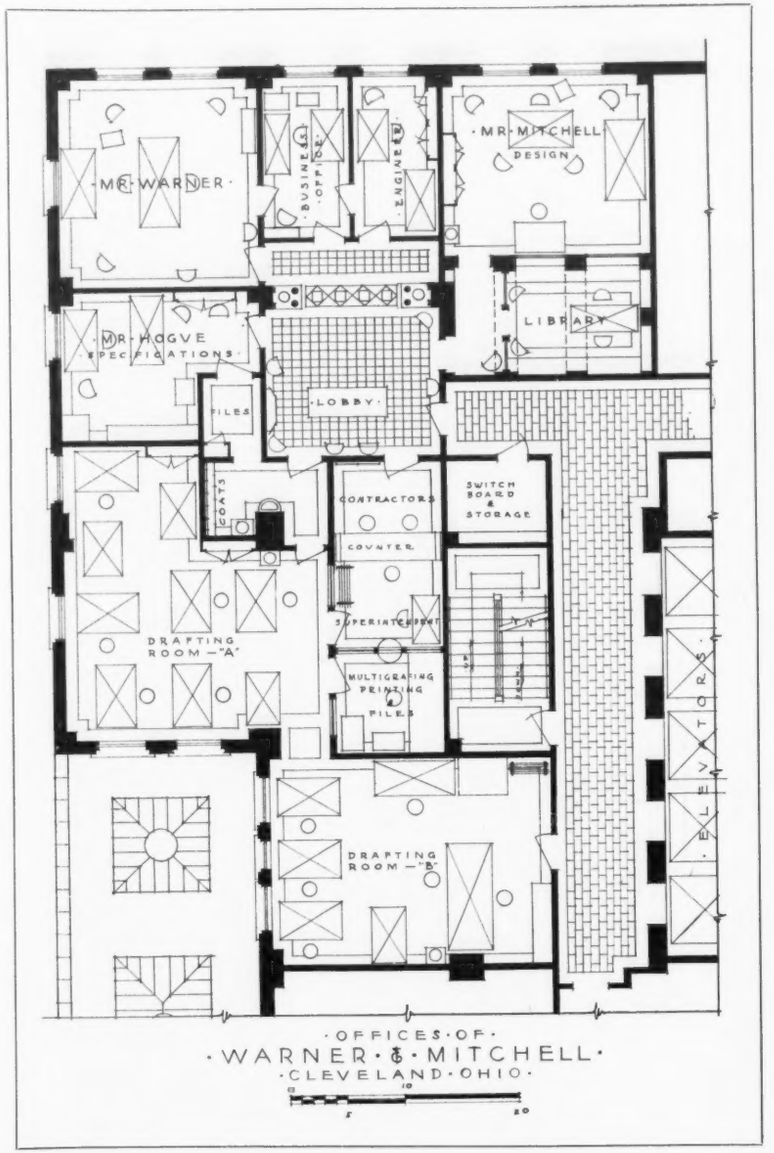
Social meetings in the fall included a dinner at the Woman's Club with Dr. Delgrado, consul from Colombia, as speaker. His subject was *Problems of Latin Women, Social, Religious, and Educational, as Compared to American Women.* On November 17th, A. C. Webb of Paris, France, gave a talk and an exhibit of some of his work at the College Club.

THE ARCHITECTS' CLUB OF CHICAGO

On November 10th, the Chicago Chapter, American Institute of Architects, held a joint meeting with the Architects' Club of Chicago at the Architects' Club, 1801 Prairie Avenue. The main business of the evening was the presentation of the Gold Medal of the American Institute of Architects, Chicago Chapter, by Howard L. Cheney, Past President, to Ernest Grunsfeld for his Adler Planetarium design. About 150 attended this meeting and guests of honor were Mr. Max Adler and Dr. Fox of the Planetarium. Dr. Fox revealed at this meeting that the astronomical instruments in the Planetarium Museum are of the finest authentic kind to be found any place in the world.

On November 20th, the Architects' Club of Chicago held their Annual Thanksgiving and formal Welcoming Party to their President, Alfred H. Granger. Mr. Granger gave a very fine talk covering his year's study in Austria, which was devoted to the origin of modern architecture. After an evening of musical entertainment, a fund was raised to help the architects' contribution to the General Relief Fund.

MR. WARNER'S OFFICE, WHICH IS ALSO USED FOR A CONFERENCE ROOM



PLAN OF GENERAL OFFICE

THE OFFICES OF WARNER & MITCHELL, ARCHITECTS, CLEVELAND, OHIO

THE LIBRARY FROM THE LOBBY

THE LOBBY

THE OFFICES OF WARNER & MITCHELL, ARCHITECTS, CLEVELAND, OHIO

HERE AND THERE AND THIS AND THAT

This department conducts four competitions each month. A prize of $10.00 is awarded in each class as follows: Class 1, sketches or drawings in any medium; Class 2, poetry; Class 3, cartoons; Class 4, miscellaneous items not coming under the above headings. Everyone is eligible to enter material in any of these four divisions. Good Wrinkle Section: a prize of $10.00 is awarded for any suggestion as to how work in the drafting room may be facilitated. No matter how simple the scheme, if you have found it of help in making your work easier, send it in. Competitions close the fifteenth of each month so that contributions for a forthcoming issue must be received by the twelfth of the month preceding the publication date in order to be eligible for that month's competitions. Material received after the closing date is entered in the following month's competition.

The publishers reserve the right to publish any of the material, other than the prize winners, at any time, unless specifically requested not to do so by the contributor.

WE CAN'T start out with awarding the prizes this month before we wish you A Bright and Prosperous 1932. Now we're all ready to award the prizes as follows:

Class I—M. O. Hodges of Lynn, Massachusetts.

Class II—Murray P. Corse, Cambridge, Massachusetts.

No awards in Classes III or IV.

Good Wrinkle—Clyde F. Trudell, Williamsburg, Virginia.

Over one hundred entries in our Christmas card competition have been received at the time of going to press. Don't forget to have your card in the mail so we'll have it by January 10th. Everyone is invited to enter original designs in any medium in this great annual Christmas card competition. Address E.L.C., in care of HERE AND THERE.

We've been racking our brains for a subject for a competition for readers of this department, but nothing results. Ever since Salvador Gloop so magnanimously contributed the prize money for your conductor's Wisdom Tooth Palanquin, we've felt it is up to us to come to the front and do likewise. We now ask for suggestions from our readers. What problem would you like to work on? Surely each one has some pet idea he's always wanted to draw up and we stand ready to offer suitable prizes. That's fair enough, isn't it? Let's hear from you by the first of February—that's plenty of time for deliberation. All suggestions will be given solemn consideration and the subject of another HERE AND THERE competition will be launched for our all-agog readers in the March issue! We thank you!

Come, come, cartoonists, and you Class IV contributors. Where's your stuff?

FROM A PENCIL SKETCH MADE AT MARBLEHEAD, MASSACHUSETTS, BY M. O. HODGES

(PRIZE—*Class One—December Competition*)

THE BRONZE TABLET DESIGNER VOICES HIS LOVE

By E. B. Crosswhite

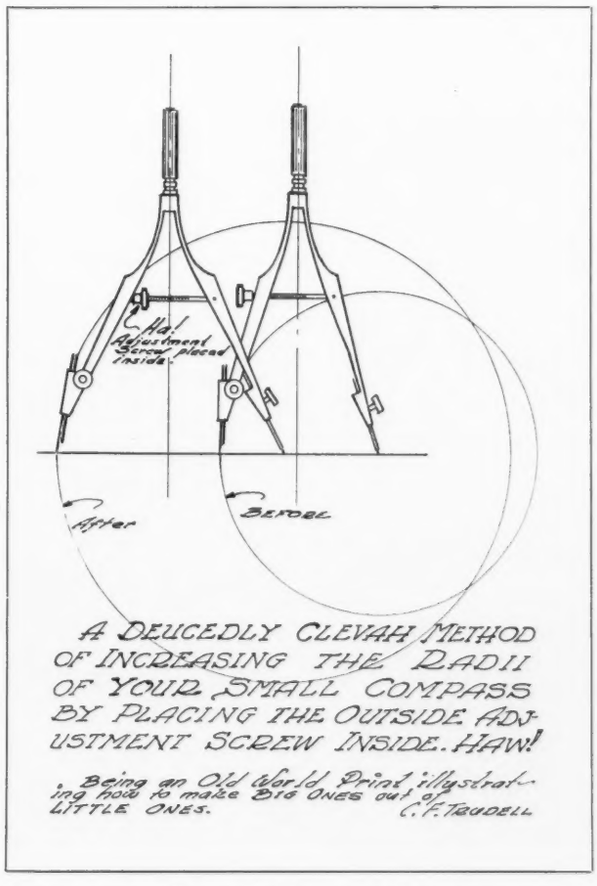
(Reprinted from "Life" for December, 1931)

NO IMPVLSE VAGVE BRINGS ME THVS VNTO YOV
AN VLSTER-MVFFLED FIGVRE, SCARF ASKEW
TO SING BENEATH YOVR SILL AND TREAD THE SNOW
VSING AS AN ACCOMPANYING RHYTHM SLOW
A VKVLELE, STRVMMED WITH FINGERS BLVE

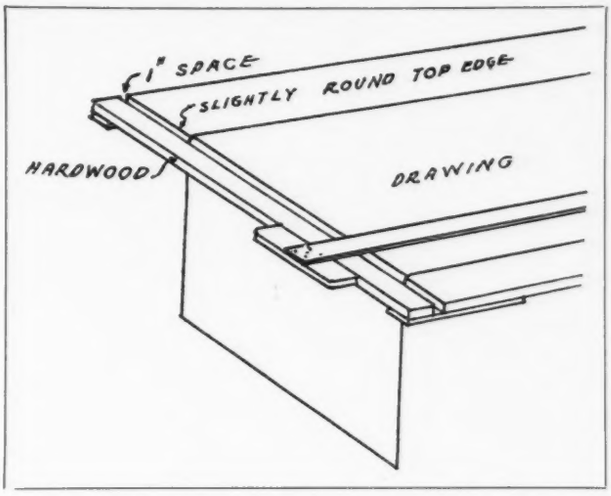
(THIS ISN'T QVITE THE WARMEST THING TO DO—
THE MERCVRY IS DOWN TO TWENTY-TWO
VNDER THIS GIBBOVS MOON,
I'D HAVE YOV KNOW!)
NO IMPVLSE VAGVE.

I'VE COME TO VTTER WORDS VIBRANT BVT TRVE
ANENT THE BVRNING LOVE I BEAR FOR YOV—
(GLOWING WITHIN ME LIKE A VAST FLAMBEAV)
AND THVS IT IS I WANT TO CHANT RONDEAVX
VNDAVNTED BY THE CHILL—YOVR LOVE TO WOO
NO IMPVLSE VAGVE.

STEVEN A. BUGAY, of Buffalo, New York, suggests a practical way of using an eye dropper. Mr. Bugay says that he has found it very useful as a substitute for the quill that comes as a stopper to bottles of drawing ink. The dropper permits quick filling and emptying of a ruling pen, is practical and worth trying.


Old Adjustment Screw placed Inside
After
Before
A DEUCEDLY CLEVAH METHOD OF INCREASING THE RADII OF YOUR SMALL COMPASS BY PLACING THE OUTSIDE ADJUSTMENT SCREW INSIDE. HAW!
Being an Old World Print illustrating how to make BIG ONES out of LITTLE ONES.
C. F. TRUDELL

SUBMITTED BY CLYDE F. TRUDELL, WILLIAMSBURG, VA.
(PRIZE—*Good Wrinkle—December Competition*)



ROBERT J. REYNOLDS of Dayton, Ohio, sends in this good wrinkle:

"When working on large drawings such as full-size details, etc., the use of a long T-square is required and a great amount of care is necessary to do accurate work at the extreme right end. With an addition to the board as shown in the drawing above the sheet can be moved to the left into a better working position, thus making it convenient to work on sheets of any length."

ENVOI

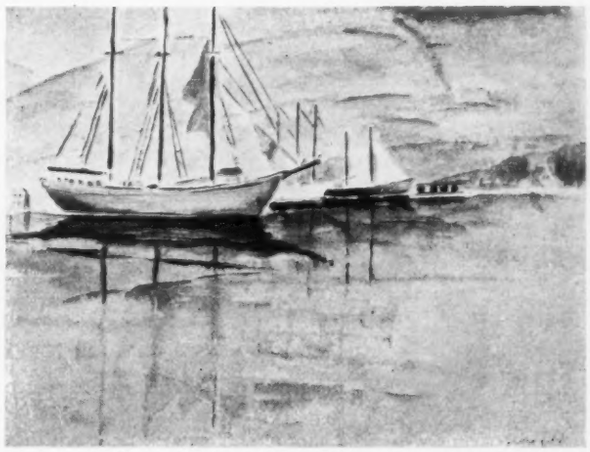
(WITH APOLOGIES TO KIPLING—AND TO THE READER)

By Murray P. Corse, Cambridge, Mass.

(PRIZE—*Class II—December Competition*)

When the earth's last building is finished
And the plans are printed and filed,
When contractor and client together
Have gone where the sun never smiled
Freed from juries, committees and critics
We shall all of us take a fresh start,
Not striving for medals or lucre,
But just for the love of our art.

And those who have worked shall continue,
Shall plan to their heart's content,
Skyscraper, cottage or palace,
According to each his bent.
Then Style shall not help us nor hinder,
For Art shall be young (but not "new"),
And each in his separate planet
Shall see all his dreams come true.



FROM A WATER COLOR DRAWING BY ALFRED WINGOLD

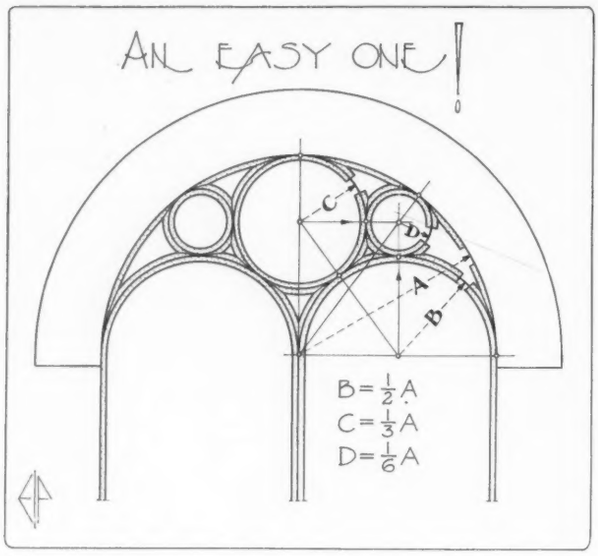


FIGURE 6

FREESE'S CORNER

Editor's Note:—*Ernest Irving Freese here answers inquiries on problems involving geometry or mathematics that have practical value to the draftsman or that, in one way or another, find application in drafting room work. Address your problem to Freese's Corner,* PENCIL POINTS, 419 Fourth Avenue, New York.

IT CAN'T BE DONE!

Under date of December 12th the Reverend J. J. Callahan, President of Duquesne University, Pittsburgh, publishes an alleged construction for trisecting a given angle in answer to Freese's challenge in PENCIL POINTS. The professor has accomplished nothing that any school kid could not do more simply. The Reverend J. J. Callahan has merely tripled a known angle; he has not trisected a given angle and he never will. His constructor given out to the press is a joke on him. Freese's challenge still stands!

A SIMPLE TRACERY LAYOUT

R. M. C. of Beverly Hills, California, says he has a "hunch" that the commensurable combination of tangent circles at Figure 6, herewith, is "correct." Well, a simple mathematical calculation proves it:—

Assume *A* equals 6. Then *B* equals 3; and *C* equals 2; and *D* equals 1. Now, calling upon our old friend Pythagoras, we are told that, if the triangle of centers is to be proved right-angular, the square of its sloping side must equal the sum of the squares of its horizontal and vertical sides; that is, the square of 5 must equal the square of 3 plus the square of 4 . . . which it does! Moreover, in order that the outer circle shall just touch each of the inner circles, *B* plus *D* plus *C* must just equal *B* plus *B*; and each summation must equal *A*. Well, 3 plus 1 plus 2 equals 6. And 3 plus 3 equals 6. And, by our previous assumption, *A* equals 6. Yep . . . . your "hunch" was right, Bob.

Now I'll give *you* one:—Suppose that *A* still remains 6, but that *B* is made 2. *Then* what are the radii *C* and *D*? Got any more hunches? Oh well, just turn this Figure around 90 degrees and look close. *There's the answer.* The circles of radii *B* and *C* just swap places, that's all!

A "BRAIN TEASER"

And now comes a post card from H.R.A., of Chicago. Craves to know how far to spread his compass so that its resultant swing will slice another nonconcentric circle into two exactly equal areas. Wow! Why mention the "famous unsolved problems of antiquity"? . . . . when a modern pencil-pusher can propound a thing like *that?* Listen, H.R.A., I think you are trying to spring a "brain-teaser" on me. Of what practical *use* to you, or to anyone else, would the answer be? . . . . *if there were one?* Answer me that . . . . and the gate to "Freese's Corner" swings wide open. It's *your* move now!

BROOKLYN CHAPTER, A.I.A.

The monthly dinner meeting of the Brooklyn Chapter, A.I.A., was held on November 30th, at the Brooklyn Elks' Club. Charles C. Wagner, President, presided.

The meeting was well attended and Albert L. Brockway, Regional Director, reported on the progress of the proposed unification of architects interested in the State of New York and of the danger to the architects' business if licensed professional engineers of any of the twenty-seven different classifications were allowed to practice in New York State.

Robert Teischman, President of the Long Island Society of Architects, and James F. Bly, President of the New York Society of Architects, were also present. A two-reel motion picture graphically portraying the application of welding to a small residence building was shown.

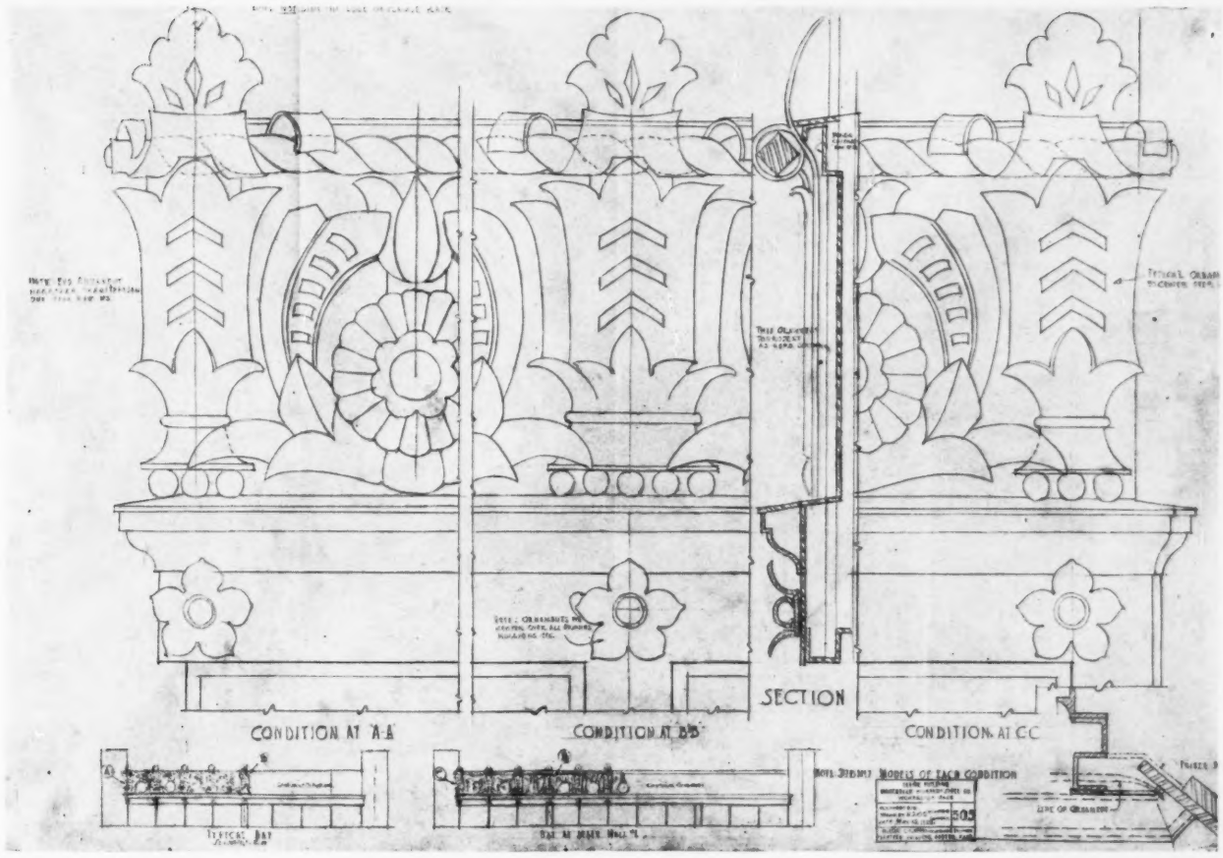
THE ATELIER NEWARK

The Atelier Newark [New Jersey] started its fourth season with the able and friendly guidance of Charles H. Bauer as Patron. Mr. Liebowitz and Mr. Bouldery are assisting as critics.

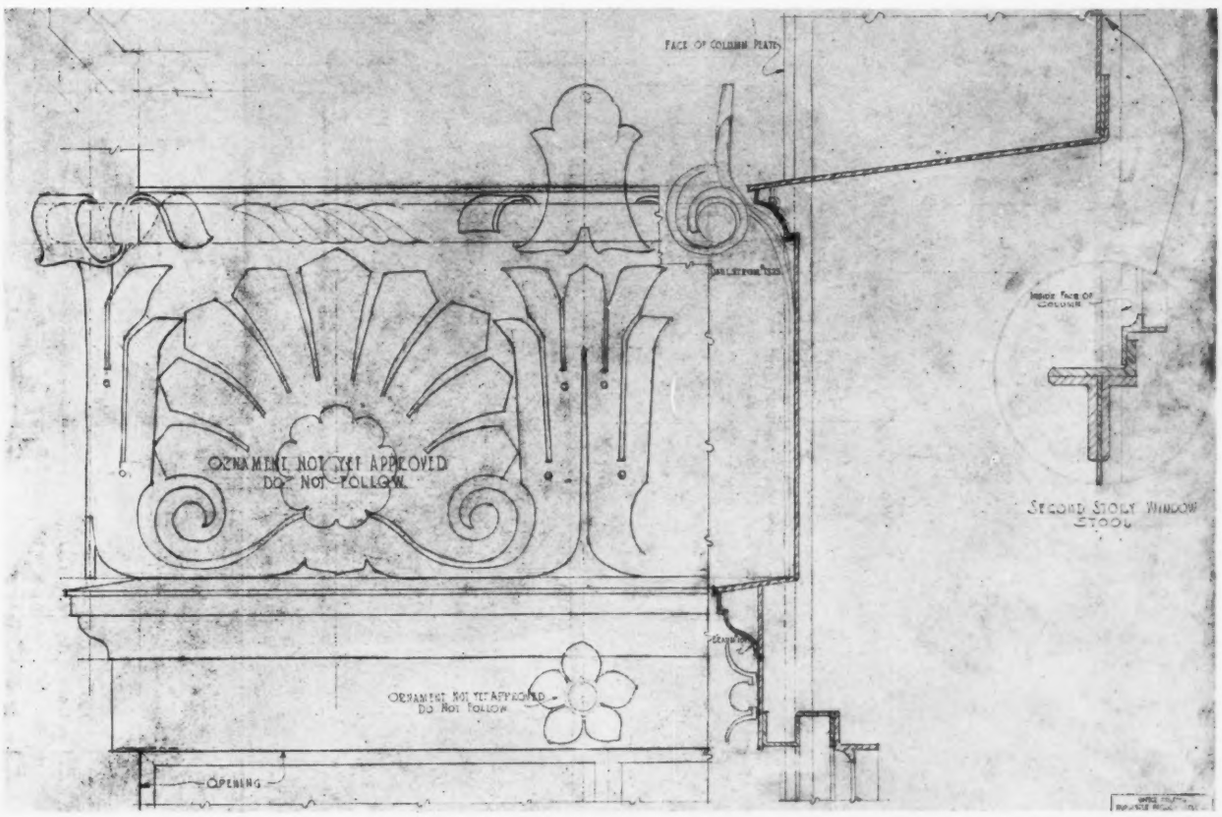
The old quarters of the Atelier, in the Newark Art Club, have been enlarged to make room for five new members making the total membership twenty.

The water-color class, which was discontinued last spring, will be taken up soon under the direction of Hobart A. Walker of East Orange.

WORCESTER PRESSED STEEL COMPANY BUILDING
JOSEPH D. LELAND & CO., ARCHITECTS AND ENGINEERS
(See pages 67 and 68 for construction details of ornament)



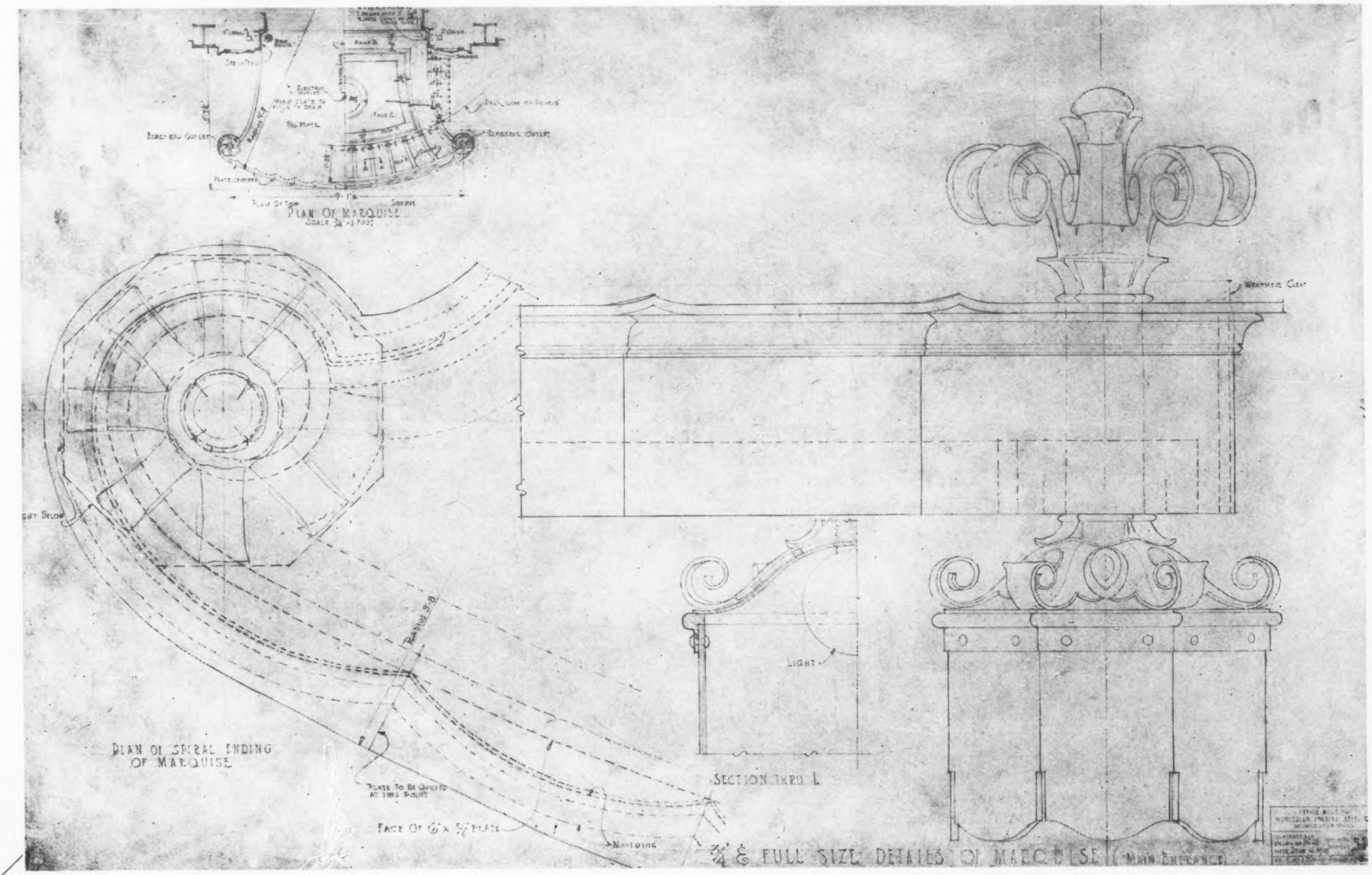
EXTERIOR DETAILS AT SECOND FLOOR LEVEL



EARLIER DETAIL AT SECOND FLOOR LEVEL

DETAILS OF ORNAMENT FOR WORCESTER PRESSED STEEL COMPANY'S OFFICE BUILDING, WORCESTER, MASSACHUSETTS

J. D. LELAND AND COMPANY, ARCHITECTS AND ENGINEERS


PLAN OF MARQUISE
PLAN OF SPIRAL ENDING OF MARQUISE
SECTION THRU L
WEATHER CLOTH
LIGHT
PLATE TO BE CUT AT THIS POINT
FACE OF 6" x 5/8" PLATE
MOULDING
3/4" & FULL SIZE DETAILS OF MARQUISE (MAIN ENTRANCE)

CONSTRUCTION DETAILS—MARQUISE OVER MAIN ENTRANCE, WORCESTER PRESSED STEEL COMPANY'S OFFICE BUILDING, WORCESTER, MASSACHUSETTS

J. D. LELAND AND COMPANY, ARCHITECTS AND ENGINEERS

THE SPECIFICATION DESK

Building Stone—2

By David B. Emerson

In addition to the native limestones, quite a few limestones are imported into the country from France, and the famous Bath stone is imported from England. Of the French stones St. Quentin Roche, which is a fossiliferous stone with a pitted surface on the sawn faces due to cutting through shells in the stone, is probably the most popular. This stone ranges in color from a light to a medium yellow and is almost if not quite as hard as Indiana limestone. At least fifteen buildings in New York have been faced either entirely or in part with it. The largest building on which it has been used is the Sherry-Netherland Hotel. These French limestones do not average to cost much over ten per cent more than Indiana limestone when laid up in the building. Although they have no better weathering qualities and look no better than Indiana limestone, they do help to give some variety to the appearance of our buildings.

Sandstones are fragmentary rocks composed of rounded and angular grains of sand, so cemented and compacted together as to form a solid rock. The cementing material may be either silica, carbonate of lime, an oxide of iron, or clayey matter. The color of the stone and its adaptability as a building stone are dependent on the cementing material. Silica alone produces light colored stones, and frequently they are so extremely hard, that it is very difficult to work them. Iron oxides produce stones which are red or brownish in color and usually not too hard to work easily. Carbonate of lime produces light-colored or gray stones which are soft and easy to work, but as a rule they do not weather as well as those with either silicious or ferruginous cementing material. The clayey cementing material is very objectionable, as it absorbs water readily, which renders the stone quite liable to injury by frost. The colors in sandstones are light gray (almost white), gray, buff, drab or blue, light brown, brown, pink, and red.

Sandstones were one of the first, if not the first, building stones to be quarried in this country. The earliest quarrying of sandstone was at Portland, Connecticut, about the middle of the seventeenth century. The ledges from which this stone was quarried were on public ground, and all those who desired stone for any purpose helped themselves. The town records show that in 1665 an ordinance was passed regulating the removal of stone and compelling all nonresidents to pay for any stone which was removed. This stone was a brown sandstone, and was used very extensively in New England and New York for over two centuries, and was shipped around the Horn in sailing vessels to San Francisco. Brown sandstones were quarried in northern New Jersey in the pre-Revolutionary times and were quite extensively used in that district and in New York City. Stone from the quarries at Belleville, near Newark, was used up to my own time. I remember as a boy working on the drawings for a church in New York City on which Belleville stone was used. There are quite a number of Colonial and post-Colonial churches in Newark, Jersey City, and the nearby towns still standing which were built from this stone, to say nothing of a goodly number of farmhouses scattered through that section which have walls of brown sandstone.

In the nineteenth century a vast amount of brown sandstone both from Connecticut and New Jersey was used in New York City. It is not an exaggerated statement to say that forty years ago there were miles and miles of brownstone-fronted houses on the streets and avenues of New York City, most of which seemed to have been made from one master design. A very bad practice was common in the mid-nineteenth century of cutting this stone across the bed, which caused it to weather very badly. As a natural result of this condition, brown sandstone acquired a bad reputation without really deserving it. If properly cut and laid on its natural quarry bed, this stone weathers very well, as may be proven by numerous examples in various sections of the country. St. Paul's church in New York City was completed in 1766, and has columns, quoins, window trim and belt courses of brown sandstone, and it has stood up very well. A number of H. H. Richardson's buildings, all of which were built previous to 1886, were built either wholly or in part of brown sandstone quarried at East Longmeadow, near Springfield, Massachusetts, and all of which I have any personal knowledge have stood up very well. Red and brown sandstones lost their vogue apparently not from any fault with the stones themselves, but from a changing architectural taste, which demanded light buff and gray stones in place of the darker, more somber colors.

Gray and yellowish sandstones were quarried at Amherst and Berea in Ohio early in the nineteenth century, and were used to some extent in Boston, New York, and other eastern cities in the seventies and eighties. At the present time there are several very interesting light sandstones on the market which are being used quite extensively with very good results. One of these stones is quarried in Ohio and another is quarried in Virginia. The Ohio stone is quarried at Glenmont in Holmes County. It is a silica sandstone, works easily and carves readily. It is a very colorful stone running to buffs, browns, purples, and pinks, often variegated, and with a warm golden tone running through all colors. This stone weathers very well and upon exposure to the weather for a period of years it seasons and develops a tough outer skin or patina which resists erosion by the elements to a remarkable degree. The quarrying of this stone was started in a very small way some seventy-five years ago, but it did not come into any prominence until of recent years. Among the prominent buildings on which it has been used are the Harkness Memorial Quadrangle at Yale and the new campus for the University of Detroit. It has been very successfully used on a number of buildings in combination with limestone, notably on the Federal Reserve Bank building in New York City.

(Continued on page 42, Advertising Section)

J. B. LELAND AND COMPANY, ARCHITECTS AND ENGINEERS

SERVICE DEPARTMENTS

THE MART. In this department we will print, free of charge, notices from readers (dealers excepted) having for sale, or desiring to purchase books, drawing instruments, and other property pertaining directly to the profession or business in which most of us are engaged. Such notices will be inserted in one issue only, but there is no limit to the number of different notices pertaining to different things which any subscriber may insert.

PERSONAL NOTICES. Announcements concerning the opening of new offices for the practice of architecture, changes in architectural firms, changes of address and items of personal interest will be printed free of charge.

FREE EMPLOYMENT SERVICE. In this department we shall continue to print, free of charge, notices from architects or others requiring designers, draftsmen, specification writers, or superintendents, as well as from those seeking similar positions. Such notices will also be posted on the job bulletin board at our main office, which is accessible to all.

SPECIAL NOTICE TO ARCHITECTS LOCATED OUTSIDE OF THE UNITED STATES: Should you be interested in any building material or equipment manufactured in America, we will gladly procure and send, without charge, any information you may desire concerning it.

Notices submitted for publication in these Service Departments must reach us before the fifth of each month if they are to be inserted in the next issue. Address all communications to 419 Fourth Avenue, New York, N. Y.

THE MART

T. O. Menees, 1823 W. 105th Street, Chicago, Ill., has for sale Pugin's *Gothic Ornament*, drawn on stone by J. D. Harding, original publication of 1831, now out of print. Good condition, rebound. Price $40.

Henry J. Larrecq, 1110 W. 51st Street, Los Angeles, Calif., has for sale the following copies of *The American Architect:* July, 1924, through December, 1928, bound; January, 1929, through December, 1931, unbound. *The Architect:* July, 1928, through June, 1931, unbound. One volume each of Guptill's *Sketching and Rendering in Pencil*; and *Winning Designs (1904-1927) for the Paris Prize*. All in good condition.

Ralph H. Oliver, 115 So. Dearborn Street, Chicago, Ill., has for sale a 9-volume set of *Material and Documents of Architecture and Sculpture*, by A. Raguenet, in good condition. Price $50.

Bernard J. Lyons, 31 Orlando Street, Springfield, Mass., would like to obtain the following copies of PENCIL POINTS: October and November, 1929; January, March, May, July, and September, 1930.

H. N., care of PENCIL POINTS MART, would like to obtain a five-foot drawing board, and T-square, stool, steel filing cabinet, etching press, and a cutting board.

Manuel F. Lopez, Mount Herman, Mass., would like to obtain the August, September, and December, 1929, issues of PENCIL POINTS.

W. A. Warrick, Jr., Skyways, Inc., Cleveland Airport, Cleveland, Ohio, would like to obtain PENCIL POINTS for April and December, 1928; and February, 1929.

C. J. Finney, Dept. of Architecture, Agricultural and Mechanical College of Texas, College Station, Texas, has the following copies of PENCIL POINTS: October and November, 1920; October and December, 1921; September, 1922; February, March, April, and December, 1923; June and July, 1925; March, April, and August, 1926; February, April, and October, 1927; March, June, and December, 1928; March and December, 1929. He will exchange these for the following copies: all of 1920 except June, October, November, and December; June, September, and November, 1921; January, June, and November, 1922; June, September, November, and December, 1923; all of 1924 except January and December; January, February, March, April, and May, 1925; June and September, 1926; August and November, 1928; November, 1929.

Conway L. Todd, 315 Alexander Street, Rochester, N. Y., would like to obtain the October, 1929, issue of PENCIL POINTS.

PERSONALS

JOHN RICHARD ROWE, ARCHITECTURAL RENDERER, is now located at 59 East 34th Street, New York, N. Y. Telephone CAledonia 5-1474.

O. A. KING, DRAFTSMAN, 617 Robie Street, Halifax, N. S., Canada, would like to receive manufacturers' catalogs.

HENRY B. WERNER, 6 So. Mason Avenue, Chicago, Ill., requests manufacturers' samples and catalogs.

JUDSON STEELE, DRAFTSMAN, 822 W. Mineral King Avenue, Visalia, Calif., would like to receive manufacturers' catalogs.

HARRY KRASHEN, 700 No. Ridgeway Avenue, Chicago, Ill., would like to receive manufacturers' samples and catalogs.

A. E. KLUEPPELBERG, ARCHITECT, has moved his office from 375 E. Fordham Road to 69 W. 46th Street, New York.

NECARSULMER & LEHLBACH, ARCHITECTS, 420 Lexington Avenue, New York, have dissolved partnership. Edward Necarsulmer will continue the practice of architecture at the same address.

PIPER & KAHRS, ARCHITECTS, have moved their offices from 441 East First Street to 1224 Linden Avenue, Long Beach, Calif.

LEO J. SHARPS, ARCHITECT, has opened an office for the practice of architecture at 1412 Burlingame Avenue, Burlingame, Calif., and would like to receive manufacturers' catalogs and samples.

SIDNEY I. DYER, DRAFTSMAN, 840 S. Spaulding Avenue, Los Angeles, Calif., would like to receive manufacturers' catalogs for an A. I. A. file.

N. W. &. J. F. HUTCHINGS, ARCHITECTS AND BUILDERS, P. O. Box 53, Hamilton, Bermuda, would like to receive manufacturers' catalogs and samples.

O. E. ROSEMAN, 2300 Spring Street, Pittsburgh, Pennsylvania, wishes to receive manufacturers' catalogs for A.I.A. file.

ISADORE L. TAMAROFF, 410 E. Elizabeth Avenue, Linden, N. J., would like to receive manufacturers' catalogs.

CLARENCE N. ALDRICH, ARCHITECT, has moved from 714 Pacific Southwest Bldg. to 1834 Dawson Avenue, Long Beach, Calif.

EMPLOYMENT SERVICE ITEMS WILL BE FOUND ON PAGE 46, ADVERTISING SECTION

ELDORADO

The Master Drawing Pencil

Berkshire Trees No 1

HONEY LOCUST. Close massing of leaves gives compact foliage areas, demanding pronounced light and shade treatment. Broad pencil strokes for leaf character. Open strokes on trunk and branches for shaggy bark. Grades B-2B-4B used here

© 1931, Jos. Dixon Cruc. Co., Jersey City, N. J.

Send for samples of Eldorado, and watch for important announcement at end of series. Next month: Chestnut tree illustrated

BUILDING STONE—2

(Continued from page 69, Editorial Section)

The Virginia sandstone is quarried at Acquia Creek in King George County. This stone was first quarried sometime in the eighteenth century, and there is an interesting story current that Washington worked the quarry, although I know of no documentary evidence to support the tale. It was used in the early construction of the Capitol and other buildings in Washington. It is harder than most of the so-called soft stones, works very well and is easily carved. In color this stone has a warm tan background with patches of color ranging from cream to orange or reddish brown. Among the buildings recently built on which this stone was used are Harkness Hall and the Gallery of Fine Arts at Yale.

Marbles are crystalline limestones. They, like all limestones, are a sedimentary formation, but have been metamorphosed by heat and pressure to a crystalline product. They are less complex in structure than almost any other stone, being almost entirely pure calcium carbonate. Marble was very extensively used as a building stone by the Greeks. The Parthenon was built about twenty-three hundred years ago of Pentelic marble (sometimes called Pentelican, Pentelikon or Marmor Pentelicum), and were it not for the vandalism of the Turks in the late eighteenth and early nineteenth centuries, it would be in an excellent state of preservation at the present time. At the time of the Empire, the Romans also made an extensive use of marble. Suetonius, writing in the second century, said of Cæsar Augustus, "He found a city built of brick, he left it built of marble." The builders of the Middle Ages and the Renaissance, so far as I have any knowledge, made very little use of marble, except as a decorative material, seeming to prefer the noncrystalline limestones and the sandstones.

The first marble to be quarried commercially in this country is claimed to have been in Montgomery County, Pennsylvania, about the time of the Revolution. This marble was extensively used in Philadelphia for many years. Philadelphia's white marble stoops and window sills were well known to all visitors a generation ago. Marble was quarried at East Dorset, Vermont, as early as 1785, but the enterprise did not assume any proportions until in the early part of the nineteenth century. In 1836 Vermont marble was used in the construction of the United States Bank of Pennsylvania at Erie, which was afterwards used as a Custom House. This building was, according to fairly recent reports, still standing and in a very good state of preservation. Vermont marbles are still very extensively used and among the more recent buildings to be built from these marbles are the New York Public Library, the stone for which came from the quarries at Dorset, and the Institute of Arts at Detroit, which is built of stone from the quarries at Danby. A little over forty years ago the quarrying of marble was commenced in northern Georgia, where an immense deposit of marble was uncovered. This marble has been quite extensively used of late years, and among the prominent buildings which have been built of this marble are the New York Stock Exchange, Cleveland Public Library, and the Field Museum in Chicago. This last building is claimed to be the largest marble building in the United States. Both the Vermont and the Georgia marbles average over ninety-eight per cent calcium carbonate, and are of a very dense formation, with the crystals interlocking. They are practically nonabsorbent having an absorption of only about one-tenth of one per cent, which is less than any other building stone, and are practically impervious to moisture, which gives them an excellent weather resisting quality. They are highly resistant to fire, more so in fact than the noncrystalline limestones and sandstones. Although both districts produce colored marbles, the best building marbles are white, with slight cloudings and veinings of gray.

Pink Tennessee marble has been used to some extent in building and has stood up very well. The Morgan Library in New York City was built of this marble and after twenty-five years, the stone is in a very good condition showing very little if any effect from the weather.

In addition to the dolomite limestones previously mentioned there are also dolomite marbles. These marbles have the same composition as the dolomite limestones, and like them are harder than the high calcium marbles. Most authorities seem to agree, that all other things being equal, dolomites are more durable than the pure limestones, both crystalline and noncrystalline. Beyond a doubt, this is positively the case in localities where the atmosphere is at all acidic, as dolomite is very little affected by these agencies. Merrill claims that stones of mixed calcite and dolomite are liable to weather unevenly, the calcite crystals become eaten out, while the dolomite particles are left and impart a rough lustreless surface to the stone. One of the largest deposits of dolomite marble in this country is located in southwestern Massachusetts and northwestern Connecticut, extending over into New York State, running down through Westchester County into the upper part of Manhattan Island. These dolomite marbles were quarried very early in the nineteenth century. The New York City Hall was built between 1803 and 1812 of dolomite marble quarried at West Stockbridge, Massachusetts, and stood up very well all things considered. Much of the present condition of the stone is due to a very ill-advised sandblasting which was given to it about twenty-five years ago. Part of the Capitol at Washington was built of dolomite from Lee, Massachusetts, and St. Patrick's Cathedral in New York City was built of dolomites quarried at Tuckahoe and at Pleasantville in Westchester County, New York. At the present time the principal source of supply for dolomite marbles is the quarries at South Dover in Dutchess County, New York. The building on the site of the Cornelius Vanderbilt mansion on Fifth Avenue in New York City and the House Office Building in Washington are two of the largest buildings which have been built of this marble. These dolomite marbles are mostly white or gray, and some are very white, turning gray with exposure. The Pleasantville marble is very white, and I well remember back in the early nineties when the spires of St. Patrick's Cathedral were still new, they were dazzlingly white, but today they are the same gray tone as the rest of the building.

In the working of marble machinery is playing a large part, as it is in the working of all other building stones. The gang saw which has been used in one form or another since before the beginning of the Christian era, has been greatly improved of late years. The diamond circular saw is now used very extensively for cross cutting and the carborundum wheel is used extensively the same as for cutting granite and limestone. Also, the sand blast is being used for carving.

(To be concluded in February)